



ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
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Prepared for:

CRG-The Chemours Co. FC, LLC
AECOM
Sabre Building
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Report Date: November 20, 2017 08:58

Project: CWK - DE RIVER NAPL DELINEATION PHASE III

Account #: 07032
Group Number: 1870508
PO Number: LBIO-67047
State of Sample Origin: NJ

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Respectfully Submitted,



Nancy Jean Bornholm
Principal Specialist

(717) 556-7250



SAMPLE INFORMATION

<u>Client Sample Description</u>	<u>Sample Collection Date/Time</u>	<u>ELLE#</u>
D15-BOR-24-(7.2-7.7)-D Soil	11/01/2017 16:00	9296921
D15-BOR-24-(7.0-7.2) Soil	11/01/2017 15:55	9296922
D15-BOR-24-(7.2-7.7) Soil	11/01/2017 16:00	9296923
CWKDERIVER3-TBLK-2 Blank Water	11/01/2017 08:45	9296924

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.



DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Eurofins Lancaster Laboratories Environmental

Client: CRG-The Chemours Co. FC, LLC

Project: CWK - DE RIVER NAPL DELINEATION PHASE III

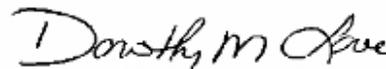
Sampling Date(s): 11/01/17

Laboratory Sample ID(s): 9296921-9296924

List DKQP Methods Used (e.g., 8260, 8270, et cetera)

SM 2540 G-1997 %Moisture Calc; SW-846 6010B; SW-846 6020; SW-846 7471A; SW-846 8260B;
SW-846 8260FRN Modified; SW-846 8270C; SW-846 9060A modified

		Yes or No
1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	Yes
1A	Were the method specified handling, preservation, and holding time requirements met?	Yes
1B	<i>EPH Method:</i> Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)?	NA
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes
3	Were samples received at an appropriate temperature ($\leq 6^{\circ}$ C)?	Yes
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	No
5A	Were reporting limits* specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	Yes
5B	Were these reporting limits met?	No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	No
<p>Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Data of Known Quality."</p> <p>*The Limit of Quantitation (LOQ) meets requirements for the Reporting Limit (RL) as defined in the NJDEP Data of Known Quality performance standards, unless otherwise noted.</p>		



Dorothy M. Love
Director

11/20/2017



Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III
ELLE Group #: 1870508

General Comments:

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below.

Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set.

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

For dual column analyses, the surrogate (for multi-surrogate tests, at least one surrogate) must be within the acceptance limits on at least one of the two columns.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:

SW-846 8260B, GC/MS Volatiles

Sample #s: 9296924

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The NJ DKQP required reporting limit could not be attained for 1,2-Dibromoethane.

Sample #s: 9296922

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: Methyl Tertiary Butyl Ether and Dichlorofluoromethane

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The concentrations reported for Benzene & Toluene are estimated since they exceed the calibration range of the instrument when determined by the low level method, but are not detected by the high level method. The results reported are from the low level determination.

The concentrations reported for 1,4-Dichlorobenzene and 1,2-Dichlorobenzene are estimated since they exceed the calibration range of the instrument when determined by the low level method, but are less than the quantitation limit when determined by the high level method. The results reported are from the high level determination.

Sample #s: 9296921

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: Chloroethane and 2-Butanone

The NJ DKQP required reporting limit could not be attained for 1,2-Dibromoethane.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Sample #s: 9296923

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: chloroethane and 2-butanone.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Batch #: R173162AA (Sample number(s): 9296921-9296923 UNSPK: P294438)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Trichlorofluoromethane, Benzene, Tetrachloroethene, Chlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, Freon 113

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: n-Hexane, Dichlorodifluoromethane, Vinyl Chloride

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: Trichlorofluoromethane, Freon 113

The recovery(ies) for one or more surrogates were below the acceptance window for sample(s) 9296923, MS, MSD

Batch #: X173131AA (Sample number(s): 9296922)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: Chlorotrifluoroethene

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD were below the acceptance window: Dichlorofluoromethane

Batch #: Y173141AA (Sample number(s): 9296924)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD were below the acceptance window: n-Hexane

SW-846 8260FRN Modified, GC/MS Volatiles

Sample #s: 9296924

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

Batch #: J173111AA (Sample number(s): 9296924)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: 1,1,2-Trifluoroethane, Chlorofluoromethane, Dichlorotrifluoroethane,

1,2-Dichlorotrifluoroethane, 1,2-Dichloro-1-fluoroethane

Batch #: J173141AA (Sample number(s): 9296921-9296923)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: Chloropentafluoroethane

SW-846 8270C, GC/MS Semivolatiles

Sample #s: 9296921, 9296922, 9296923

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

Batch #: 17314SLE026 (Sample number(s): 9296921-9296923 UNSPK: P300729)

The recovery(ies) for the following analyte(s) in the LCS exceeded the acceptance window indicating a positive bias: 2-Chloronaphthalene, 4-Aminobiphenyl

The recovery(ies) for the following analyte(s) in the LCS were below the acceptance window:
1-Naphthylamine, 2-Naphthylamine, o-Toluidine, 4-Chloroaniline

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: 4-Aminobiphenyl

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:
3,3'-Dichlorobenzidine, 1-Naphthylamine, 2-Naphthylamine, o-Toluidine, 4-Chloroaniline

SW-846 6010B, Metals

Batch #: 173100570805 (Sample number(s): 9296921-9296923 UNSPK: P300729 BKG: P300729)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Aluminum, Iron, Magnesium, Potassium

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Aluminum, Iron, Magnesium, Zinc

SW-846 6020, Metals

Sample #s: 9296921, 9296922, 9296923

The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.

Batch #: 173100570805A (Sample number(s): 9296921-9296923 UNSPK: P300729 BKG: P300729)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Manganese, Lead

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:
Antimony

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: Lead

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Copper, Manganese, Nickel, Thallium

Batch #: 173100570805D (Sample number(s): 9296921-9296923 UNSPK: P300729 BKG: P300729)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Barium

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance

windows: Barium

SW-846 7471A, Metals

Batch #: 173100571105 (Sample number(s): 9296921-9296923 UNSPK: P294438 BKG: P294438)

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:
Mercury

SW-846 9060A modified, Wet Chemistry

Sample #s: 9296922

Due to the nature of this sample matrix, the sample cup was filled to capacity with less than 1000 mg of sample being used. The lowered sample weight has resulted in a raised reporting limit.

SM 2540 G-1997 %Moisture Calc, Wet Chemistry

Batch #: 17310820007B (Sample number(s): 9296921-9296923 BKG: P296374)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Moisture

Sample Description: D15-BOR-24-(7.2-7.7)-D Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296921
ELLE Group #: 1870508
Matrix: Soil

Submission Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 16:00

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	400 U	400	1,200	44.88
10237	Benzene	71-43-2	3,400	29	290	44.88
10237	Bromodichloromethane	75-27-4	58 U	58	290	44.88
10237	2-Butanone	78-93-3	230 U	230	580	44.88
10237	n-Butylbenzene	104-51-8	58 U	58	290	44.88
10237	sec-Butylbenzene	135-98-8	58 U	58	290	44.88
10237	tert-Butylbenzene	98-06-6	58 U	58	290	44.88
10237	Carbon Disulfide	75-15-0	58 U	58	290	44.88
10237	Carbon Tetrachloride	56-23-5	58 U	58	290	44.88
10237	Chlorobenzene	108-90-7	7,900	58	290	44.88
10237	Chloroethane	75-00-3	120 U	120	290	44.88
10237	Chloroform	67-66-3	550	58	290	44.88
10237	Chloromethane	74-87-3	120 U	120	290	44.88
10237	2-Chlorotoluene	95-49-8	58 U	58	290	44.88
10237	4-Chlorotoluene	106-43-4	58 U	58	290	44.88
10237	Chlorotrifluoroethene	79-38-9	120 U	120	290	44.88
10237	Dibromochloromethane	124-48-1	58 U	58	290	44.88
10237	1,2-Dibromoethane	106-93-4	58 U	58	290	44.88
10237	1,2-Dichlorobenzene	95-50-1	3,900	58	290	44.88
10237	1,3-Dichlorobenzene	541-73-1	230 J	58	290	44.88
10237	1,4-Dichlorobenzene	106-46-7	6,800	58	290	44.88
10237	Dichlorodifluoromethane	75-71-8	120 U	120	290	44.88
10237	1,1-Dichloroethane	75-34-3	58 U	58	290	44.88
10237	1,2-Dichloroethane	107-06-2	58 U	58	290	44.88
10237	1,1-Dichloroethene	75-35-4	58 U	58	290	44.88
10237	cis-1,2-Dichloroethene	156-59-2	58 U	58	290	44.88
10237	trans-1,2-Dichloroethene	156-60-5	58 U	58	290	44.88
10237	1,2-Dichloroethene (Total)	540-59-0	58 U	58	290	44.88
10237	Dichlorofluoromethane	75-43-4	120 U	120	290	44.88
10237	1,2-Dichloropropane	78-87-5	58 U	58	290	44.88
10237	1,1-Dichloropropene	563-58-6	58 U	58	290	44.88
10237	cis-1,3-Dichloropropene	10061-01-5	58 U	58	290	44.88
10237	Ethylbenzene	100-41-4	250 J	58	290	44.88
10237	Freon 113	76-13-1	120 U	120	580	44.88
10237	Freon 133a	75-88-7	120 U	120	290	44.88
10237	n-Hexane	110-54-3	58 U	58	290	44.88
10237	2-Hexanone	591-78-6	170 U	170	580	44.88
10237	Isobutyl Alcohol	78-83-1	5,800 U	5,800	14,000	44.88
10237	Isopropylbenzene	98-82-8	58 U	58	290	44.88
10237	p-Isopropyltoluene	99-87-6	58 U	58	290	44.88
10237	Methacrylonitrile	126-98-7	290 U	290	2,900	44.88
10237	Methyl Methacrylate	80-62-6	58 U	58	290	44.88

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.2-7.7)-D Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296921
ELLE Group #: 1870508
Matrix: Soil

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 16:00

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Methyl Tertiary Butyl Ether	1634-04-4	29 U	29	290	44.88
10237	4-Methyl-2-pentanone	108-10-1	170 U	170	580	44.88
10237	Methylene Chloride	75-09-2	120 U	120	290	44.88
10237	Propionitrile	107-12-0	1,700 U	1,700	5,800	44.88
10237	n-Propylbenzene	103-65-1	58 U	58	290	44.88
10237	Styrene	100-42-5	58 U	58	290	44.88
10237	1,1,1,2-Tetrachloroethane	630-20-6	58 U	58	290	44.88
10237	1,1,2,2-Tetrachloroethane	79-34-5	58 U	58	290	44.88
10237	Tetrachloroethene	127-18-4	58 U	58	290	44.88
10237	Tetrahydrofuran	109-99-9	230 U	230	460	44.88
10237	Toluene	108-88-3	1,700	58	290	44.88
10237	1,1,1-Trichloroethane	71-55-6	58 U	58	290	44.88
10237	1,1,2-Trichloroethane	79-00-5	58 U	58	290	44.88
10237	Trichloroethene	79-01-6	58 U	58	290	44.88
10237	Trichlorofluoromethane	75-69-4	120 U	120	290	44.88
10237	1,2,4-Trimethylbenzene	95-63-6	58 U	58	290	44.88
10237	1,3,5-Trimethylbenzene	108-67-8	58 U	58	290	44.88
10237	Vinyl Chloride	75-01-4	58 U	58	290	44.88
10237	m+p-Xylene	179601-23-1	870	58	290	44.88
10237	o-Xylene	95-47-6	330	58	290	44.88
10237	Xylene (Total)	1330-20-7	1,200	58	290	44.88

The project QA/QC requirements were not met.

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: Chloroethane and 2-Butanone

The NJ DKQP required reporting limit could not be attained for 1,2-Dibromoethane.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg
13101	Chlorodifluoroethane	75-68-3	1 U	6
13101	Chlorodifluoromethane	75-45-6	3 U	6
13101	Chlorofluoromethane	593-70-4	1 U	6
13101	Chloropentafluoroethane	76-15-3	19 U	65
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1 U	6
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	6
13101	Dichlorotetrafluoroethane	76-14-2	3 U	6
13101	1,2-Dichlorotrifluoroethane	354-23-4	2 J	6
13101	Dichlorotrifluoroethane	306-83-2	1 U	6

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.2-7.7)-D Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296921
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Matrix: Soil

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 16:00

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg	
13101	Fluoromethane	593-53-3	4 U	4	13	1.01
13101	Freon 113a	354-58-5	6 U	6	26	1.01
13101	1,1,2-Trifluoroethane	430-66-0	3 U	3	6	1.01
13101	Vinyl fluoride	75-02-5	8 U	8	26	1.01

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	4 U	4	22	1
10723	Acenaphthylene	208-96-8	4 U	4	22	1
10723	Acetophenone	98-86-2	21 U	21	42	1
10723	4-Aminobiphenyl	92-67-1	210 U	210	630	1
10723	Aniline	62-53-3	220 J	210	630	1
10723	Anthracene	120-12-7	4 U	4	22	1
10723	Benzidine	92-87-5	320 U	320	630	1
10723	Benzo(a)anthracene	56-55-3	4 U	4	22	1
10723	Benzo(a)pyrene	50-32-8	4 U	4	22	1
10723	Benzo(b)fluoranthene	205-99-2	4 U	4	22	1
10723	Benzo(g,h,i)perylene	191-24-2	4 U	4	22	1
10723	Benzo(k)fluoranthene	207-08-9	4 U	4	22	1
10723	1,1'-Biphenyl	92-52-4	21 U	21	42	1
10723	4-Bromophenyl-phenylether	101-55-3	21 U	21	42	1
10723	Butylbenzylphthalate	85-68-7	85 U	85	210	1
10723	Di-n-butylphthalate	84-74-2	85 U	85	210	1
10723	Carbazole	86-74-8	21 U	21	42	1
10723	4-Chloro-3-methylphenol	59-50-7	21 U	21	42	1
10723	4-Chloroaniline	106-47-8	42 U	42	85	1
10723	bis(2-Chloroethoxy)methane	111-91-1	21 U	21	42	1
10723	bis(2-Chloroethyl)ether	111-44-4	21 U	21	42	1
10723	2-Chloronaphthalene	91-58-7	8 U	8	42	1
10723	2-Chlorophenol	95-57-8	160	21	42	1
10723	4-Chlorophenyl-phenylether	7005-72-3	21 U	21	42	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	21 U	21	42	1
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4 U	4	22	1
10723	Dibenz(a,h)anthracene	53-70-3	4 U	4	22	1
10723	Dibenzofuran	132-64-9	21 U	21	42	1

*=This limit was used in the evaluation of the final result

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CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296921
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Matrix: Soil

Submission Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 16:00

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles		SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	3,3'-Dichlorobenzidine	91-94-1	130 U	130	420	1
10723	2,4-Dichlorophenol	120-83-2	21 U	21	42	1
10723	Diethylphthalate	84-66-2	85 U	85	210	1
10723	2,4-Dimethylphenol	105-67-9	31 J	21	42	1
10723	Dimethylphthalate	131-11-3	85 U	85	210	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	210 U	210	630	1
10723	2,4-Dinitrophenol	51-28-5	380 U	380	1,300	1
10723	2,4-Dinitrotoluene	121-14-2	85 U	85	210	1
10723	2,6-Dinitrotoluene	606-20-2	21 U	21	42	1
10723	1,4-Dioxane	123-91-1	130 U	130	420	1
10723	Diphenyl ether	101-84-8	21 U	21	42	1
10723	1,2-Diphenylhydrazine	122-66-7	21 U	21	42	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	85 U	85	220	1
10723	Fluoranthene	206-44-0	4 U	4	22	1
10723	Fluorene	86-73-7	4 U	4	22	1
10723	Hexachlorobenzene	118-74-1	4 U	4	22	1
10723	Hexachlorobutadiene	87-68-3	21 U	21	42	1
10723	Hexachlorocyclopentadiene	77-47-4	210 U	210	630	1
10723	Hexachloroethane	67-72-1	42 U	42	210	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4 U	4	22	1
10723	Isophorone	78-59-1	21 U	21	42	1
10723	2-Methylnaphthalene	91-57-6	4 U	4	22	1
10723	2-Methylphenol	95-48-7	32 J	21	42	1
10723	4-Methylphenol	106-44-5	34 J	21	42	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	Naphthalene	91-20-3	21 J	4	22	1
10723	1-Naphthylamine	134-32-7	210 U	210	630	1
10723	2-Naphthylamine	91-59-8	210 U	210	630	1
10723	2-Nitroaniline	88-74-4	21 U	21	42	1
10723	3-Nitroaniline	99-09-2	85 U	85	210	1
10723	4-Nitroaniline	100-01-6	85 U	85	210	1
10723	Nitrobenzene	98-95-3	21 U	21	42	1
10723	2-Nitrophenol	88-75-5	21 U	21	42	1
10723	4-Nitrophenol	100-02-7	210 U	210	630	1
10723	N-Nitrosodimethylamine	62-75-9	85 U	85	210	1
10723	N-Nitroso-di-n-propylamine	621-64-7	21 U	21	42	1
10723	N-Nitrosodiphenylamine	86-30-6	21 U	21	42	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	85 U	85	210	1

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.2-7.7)-D Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296921
ELLE Group #: 1870508
Matrix: Soil

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 16:00

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	
10723	Parathion	56-38-2	210 U	210	630	1
10723	Pentachlorobenzene	608-93-5	21 U	21	42	1
10723	Pentachlorophenol	87-86-5	42 U	42	220	1
10723	Phenanthrene	85-01-8	4 U	4	22	1
10723	Phenol	108-95-2	120	21	42	1
10723	Pyrene	129-00-0	4 U	4	22	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	85 U	85	210	1
10723	o-Toluidine	95-53-4	250 U	250	850	1
10723	1,2,4-Trichlorobenzene	120-82-1	72	21	42	1
10723	2,4,5-Trichlorophenol	95-95-4	21 U	21	42	1
10723	2,4,6-Trichlorophenol	88-06-2	21 U	21	42	1

The project QA/QC requirements were not met.
Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg		
01643	Aluminum	7429-90-5	19,100	10.1	22.5	1
01650	Calcium	7440-70-2	862	3.74	22.5	1
01654	Iron	7439-89-6	50,900	45.3	112	5
01657	Magnesium	7439-95-4	842	2.73	11.2	1
01662	Potassium	7440-09-7	924	18.8	56.2	1
01667	Sodium	7440-23-5	294	18.8	112	1
06972	Zinc	7440-66-6	31.9	0.270	2.25	1
SW-846 6020			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.127 J	0.105	0.225	2
The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.						
06125	Arsenic	7440-38-2	10.2	0.144	0.450	2
06126	Barium	7440-39-3	90.2	0.204	0.450	2
06127	Beryllium	7440-41-7	1.34	0.0118	0.112	2
06128	Cadmium	7440-43-9	0.0387 U	0.0387	0.112	2
06131	Chromium	7440-47-3	40.9	0.196	0.450	2
06132	Cobalt	7440-48-4	9.77	0.0351	0.112	2
06133	Copper	7440-50-8	39.4	0.121	0.450	2
06135	Lead	7439-92-1	11.5	0.0250	0.225	2
06137	Manganese	7439-96-5	71.4	0.203	0.450	2
06139	Nickel	7440-02-0	13.2	0.224	0.450	2
06141	Selenium	7782-49-2	0.343 J	0.112	0.450	2

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.2-7.7)-D Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296921
ELLE Group #: 1870508
Matrix: Soil

Submission Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 16:00

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6020	mg/kg	mg/kg	mg/kg	
06142	Silver	7440-22-4	0.0436 J	0.0328	0.112	2
06145	Thallium	7440-28-0	0.184	0.0281	0.112	2
06148	Vanadium	7440-62-2	49.4	0.0479	0.112	2
SW-846 7471A						
			mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0168 J	0.0118	0.118	1
Wet Chemistry						
		SW-846 9060A modified	mg/kg	mg/kg	mg/kg	
02079	Total Organic Carbon (TOC)	n.a.	3,070	223	669	1
Wet Chemistry						
		SM 2540 G-1997	%	%	%	
		%Moisture Calc				
00111	Moisture	n.a.	22.0	0.50	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173162AA	11/13/2017 00:44	Stephen C Nolte	44.88
13101	Freons	SW-846 8260FRN Modified	1	J173141AA	11/11/2017 03:34	Patrick T Herres	1.01
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730747732	11/03/2017 13:01	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730747732	11/03/2017 13:01	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730747732	11/03/2017 13:02	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730747732	11/03/2017 13:03	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730747732	11/03/2017 13:00	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17314SLE026	11/13/2017 14:05	Linda M Hartenstine	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	17314SLE026	11/11/2017 08:00	David S Schrum	1
01643	Aluminum	SW-846 6010B	1	173100570805	11/12/2017 21:41	Elaine F Stoltzfus	1
01650	Calcium	SW-846 6010B	1	173100570805	11/12/2017 21:41	Elaine F Stoltzfus	1
01654	Iron	SW-846 6010B	1	173100570805	11/14/2017 05:26	Jonathan J Allen	5
01657	Magnesium	SW-846 6010B	1	173100570805	11/12/2017 21:41	Elaine F Stoltzfus	1
01662	Potassium	SW-846 6010B	1	173100570805	11/12/2017 21:41	Elaine F Stoltzfus	1
01667	Sodium	SW-846 6010B	1	173100570805	11/12/2017 21:41	Elaine F Stoltzfus	1
06972	Zinc	SW-846 6010B	1	173100570805	11/12/2017 21:41	Elaine F Stoltzfus	1
06124	Antimony	SW-846 6020	1	173100570805A	11/13/2017 18:49	Bradley M Berlot	2
06125	Arsenic	SW-846 6020	1	173100570805A	11/13/2017 18:49	Bradley M Berlot	2

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.2-7.7)-D Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296921
ELLE Group #: 1870508
Matrix: Soil

Submission Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 16:00

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	173100570805D	11/13/2017 18:49	Bradley M Berlot	2
06127	Beryllium	SW-846 6020	1	173100570805A	11/13/2017 18:49	Bradley M Berlot	2
06128	Cadmium	SW-846 6020	1	173100570805A	11/13/2017 18:49	Bradley M Berlot	2
06131	Chromium	SW-846 6020	1	173100570805A	11/13/2017 18:49	Bradley M Berlot	2
06132	Cobalt	SW-846 6020	1	173100570805A	11/13/2017 18:49	Bradley M Berlot	2
06133	Copper	SW-846 6020	1	173100570805A	11/13/2017 18:49	Bradley M Berlot	2
06135	Lead	SW-846 6020	1	173100570805A	11/13/2017 18:49	Bradley M Berlot	2
06137	Manganese	SW-846 6020	1	173100570805A	11/13/2017 18:49	Bradley M Berlot	2
06139	Nickel	SW-846 6020	1	173100570805A	11/13/2017 18:49	Bradley M Berlot	2
06141	Selenium	SW-846 6020	1	173100570805B	11/13/2017 18:49	Bradley M Berlot	2
06142	Silver	SW-846 6020	1	173100570805A	11/13/2017 18:49	Bradley M Berlot	2
06145	Thallium	SW-846 6020	1	173100570805A	11/13/2017 18:49	Bradley M Berlot	2
06148	Vanadium	SW-846 6020	1	173100570805A	11/13/2017 18:49	Bradley M Berlot	2
00159	Mercury	SW-846 7471A	1	173100571105	11/09/2017 07:04	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173100570805	11/09/2017 05:21	James L Mertz	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173100571105	11/08/2017 19:45	Barbara A Kane	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667632A	11/14/2017 21:19	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820007B	11/06/2017 23:04	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: Lancaster Laboratories	Contract: _____	! _____ !
Lab Code: LANCAS	Case No.: _____	! D1501 !
Matrix: (soil/water) SOIL	SAS No.: _____	! _____ !
Sample wt/vol: 5.57 (g/mL) g	Lab Sample ID: 9296921	SDG No.: _____
Level: (low/med) MED	Lab File ID: HP07566.i/17nov12a.b/rn12s40.d	
% Moisture: not dec. 22	Date Received: 11/02/17	
Column: (pack/cap) CAP	Date Analyzed: 11/13/17	
	Dilution Factor: 44.9	
	CONCENTRATION UNITS:	
	(ug/L or ug/Kg) ug/Kg	

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
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15.				
16.				
17.				
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21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: Lancaster Laboratories Contract: _____
 Lab Code: LANCAS Case No.: _____ SAS No.: _____
 Matrix: (soil/water) SOIL Lab Sample ID: 9296921
 Sample wt/vol: 30.3 (g/mL) g Lab File ID: ok0570.d
 Level: (low/med) LOW Date Received: 11/02/17
 % Moisture: 22 Decanted: (Y/N) Date Extracted: 11/11/17
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/13/17
 Injection Volume: 1 (uL) Dilution Factor: 1
 GPC Cleanup: N pH: _____ Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 16 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	!Unknown Aldol Condensate	2.993	300	JB
2.583-78-8	!Phenol, 2,5-dichloro-	6.451	180	J
3.106-48-9	!Parachlorophenol	6.622	230	J
4.	!Unknown	8.463	210	J
5.	!Unknown	9.780	170	J
6.57-10-3	!n-Hexadecanoic acid	10.327	470	J
7.	!Unknown	10.445	360	J
8.	!Unknown	10.545	190	J
9.	!Unknown	10.574	180	J
10.	!Unknown	10.598	230	J
11.	!Unknown	10.645	250	J
12.	!Unknown	10.692	380	J
13.	!Unknown acid	10.716	210	J
14.	!Unknown	10.745	290	J
15.10544-50-0	!Cyclic octaatomic sulfur	10.851	4200	J
16.80-05-7	!Phenol, 4,4'-(1-methylethyl)	11.174	440	J
17.				
18.SVOCTIC	!Total SVOC TICs		8300	JB
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Sample Description: D15-BOR-24-(7.0-7.2) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296922
ELLE Group #: 1870508
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 15:55

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	46	8	23	1
10237	Benzene	71-43-2	810 E	0.6	6	1
10237	Bromodichloromethane	75-27-4	1 U	1	6	1
10237	2-Butanone	78-93-3	5 U	5	11	1
10237	n-Butylbenzene	104-51-8	1 U	1	6	1
10237	sec-Butylbenzene	135-98-8	1 U	1	6	1
10237	tert-Butylbenzene	98-06-6	1 U	1	6	1
10237	Carbon Disulfide	75-15-0	63	1	6	1
10237	Carbon Tetrachloride	56-23-5	1 U	1	6	1
10237	Chlorobenzene	108-90-7	62 U	62	310	54.95
10237	Chloroethane	75-00-3	2 U	2	6	1
10237	Chloroform	67-66-3	260	1	6	1
10237	Chloromethane	74-87-3	2 U	2	6	1
10237	2-Chlorotoluene	95-49-8	1 U	1	6	1
10237	4-Chlorotoluene	106-43-4	1 U	1	6	1
10237	Chlorotrifluoroethene	79-38-9	2 U	2	6	1
10237	Dibromochloromethane	124-48-1	1 U	1	6	1
10237	1,2-Dibromoethane	106-93-4	1 U	1	6	1
10237	1,2-Dichlorobenzene	95-50-1	95 J	62	310	54.95
10237	1,3-Dichlorobenzene	541-73-1	27	1	6	1
10237	1,4-Dichlorobenzene	106-46-7	130 J	62	310	54.95
10237	Dichlorodifluoromethane	75-71-8	2 U	2	6	1
10237	1,1-Dichloroethane	75-34-3	1 U	1	6	1
10237	1,2-Dichloroethane	107-06-2	1 U	1	6	1
10237	1,1-Dichloroethene	75-35-4	1 U	1	6	1
10237	cis-1,2-Dichloroethene	156-59-2	1 U	1	6	1
10237	trans-1,2-Dichloroethene	156-60-5	1 U	1	6	1
10237	1,2-Dichloroethene (Total)	540-59-0	1 U	1	6	1
10237	Dichlorofluoromethane	75-43-4	2 U	2	6	1
10237	1,2-Dichloropropane	78-87-5	1 U	1	6	1
10237	1,1-Dichloropropene	563-58-6	1 U	1	6	1
10237	cis-1,3-Dichloropropene	10061-01-5	1 U	1	6	1
10237	Ethylbenzene	100-41-4	44	1	6	1
10237	Freon 113	76-13-1	5 J	2	11	1
10237	Freon 133a	75-88-7	2 U	2	6	1
10237	n-Hexane	110-54-3	1 U	1	6	1
10237	2-Hexanone	591-78-6	3 U	3	11	1
10237	Isobutyl Alcohol	78-83-1	110 U	110	280	1
10237	Isopropylbenzene	98-82-8	1 U	1	6	1
10237	p-Isopropyltoluene	99-87-6	1 U	1	6	1
10237	Methacrylonitrile	126-98-7	6 U	6	56	1
10237	Methyl Methacrylate	80-62-6	1 U	1	6	1

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.0-7.2) Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296922
ELLE Group #: 1870508
Matrix: Soil

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 15:55

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.6 U	0.6	6	1
10237	4-Methyl-2-pentanone	108-10-1	3 U	3	11	1
10237	Methylene Chloride	75-09-2	16	2	6	1
10237	Propionitrile	107-12-0	34 U	34	110	1
10237	n-Propylbenzene	103-65-1	1 U	1	6	1
10237	Styrene	100-42-5	1 U	1	6	1
10237	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	6	1
10237	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	6	1
10237	Tetrachloroethene	127-18-4	1 U	1	6	1
10237	Tetrahydrofuran	109-99-9	5 U	5	9	1
10237	Toluene	108-88-3	360	1	6	1
10237	1,1,1-Trichloroethane	71-55-6	1 U	1	6	1
10237	1,1,2-Trichloroethane	79-00-5	1 U	1	6	1
10237	Trichloroethene	79-01-6	1 U	1	6	1
10237	Trichlorofluoromethane	75-69-4	4 J	2	6	1
10237	1,2,4-Trimethylbenzene	95-63-6	1 U	1	6	1
10237	1,3,5-Trimethylbenzene	108-67-8	1 U	1	6	1
10237	Vinyl Chloride	75-01-4	1 U	1	6	1
10237	m+p-Xylene	179601-23-1	130	1	6	1
10237	o-Xylene	95-47-6	57	1	6	1
10237	Xylene (Total)	1330-20-7	190	1	6	1

The project QA/QC requirements were not met.

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: Methyl Tertiary Butyl Ether and Dichlorofluoromethane

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The concentrations reported for Benzene & Toluene are estimated since they exceed the calibration range of the instrument when determined by the low level method, but are not detected by the high level method. The results reported are from the low level determination.

The concentrations reported for 1,4-Dichlorobenzene and 1,2-Dichlorobenzene are estimated since they exceed the calibration range of the instrument when determined by the low level method, but are less than the quantitation limit when determined by the high level method. The results reported are from the high level determination.

GC/MS Volatiles **SW-846 8260FRN Modified** **ug/kg** **ug/kg** **ug/kg**

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.0-7.2) Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296922
ELLE Group #: 1870508
Matrix: Soil

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 15:55

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg	
13101	Chlorodifluoroethane	75-68-3	1 U	1	6	0.99
13101	Chlorodifluoromethane	75-45-6	2 U	2	6	0.99
13101	Chlorofluoromethane	593-70-4	1 U	1	6	0.99
13101	Chloropentafluoroethane	76-15-3	17 U	17	56	0.99
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1 U	1	6	0.99
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	1	6	0.99
13101	Dichlorotetrafluoroethane	76-14-2	2 U	2	6	0.99
13101	1,2-Dichlorotrifluoroethane	354-23-4	1 U	1	6	0.99
13101	Dichlorotrifluoroethane	306-83-2	1 U	1	6	0.99
13101	Fluoromethane	593-53-3	3 U	3	11	0.99
13101	Freon 113a	354-58-5	6 U	6	22	0.99
13101	1,1,2-Trifluoroethane	430-66-0	2 U	2	6	0.99
13101	Vinyl fluoride	75-02-5	7 U	7	22	0.99

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg
10723	Acenaphthene	83-32-9	4 U	19
10723	Acenaphthylene	208-96-8	4 U	19
10723	Acetophenone	98-86-2	19 U	37
10723	4-Aminobiphenyl	92-67-1	190 U	560
10723	Aniline	62-53-3	190 U	560
10723	Anthracene	120-12-7	4 U	19
10723	Benzidine	92-87-5	280 U	560
10723	Benzo(a)anthracene	56-55-3	4 U	19
10723	Benzo(a)pyrene	50-32-8	4 U	19
10723	Benzo(b)fluoranthene	205-99-2	4 U	19
10723	Benzo(g,h,i)perylene	191-24-2	4 U	19
10723	Benzo(k)fluoranthene	207-08-9	4 U	19
10723	1,1'-Biphenyl	92-52-4	19 U	37
10723	4-Bromophenyl-phenylether	101-55-3	19 U	37
10723	Butylbenzylphthalate	85-68-7	74 U	190
10723	Di-n-butylphthalate	84-74-2	74 U	190
10723	Carbazole	86-74-8	19 U	37
10723	4-Chloro-3-methylphenol	59-50-7	19 U	37
10723	4-Chloroaniline	106-47-8	37 U	74
10723	bis(2-Chloroethoxy)methane	111-91-1	19 U	37
10723	bis(2-Chloroethyl)ether	111-44-4	19 U	37
10723	2-Chloronaphthalene	91-58-7	7 U	37

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.0-7.2) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296922
ELLE Group #: 1870508
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 15:55

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles		SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	2-Chlorophenol	95-57-8	19 U	19	37	1
10723	4-Chlorophenyl-phenylether	7005-72-3	19 U	19	37	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	19 U	19	37	1
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4 U	4	19	1
10723	Dibenz(a,h)anthracene	53-70-3	4 U	4	19	1
10723	Dibenzofuran	132-64-9	19 U	19	37	1
10723	3,3'-Dichlorobenzidine	91-94-1	110 U	110	370	1
10723	2,4-Dichlorophenol	120-83-2	19 U	19	37	1
10723	Diethylphthalate	84-66-2	74 U	74	190	1
10723	2,4-Dimethylphenol	105-67-9	19 U	19	37	1
10723	Dimethylphthalate	131-11-3	74 U	74	190	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	190 U	190	560	1
10723	2,4-Dinitrophenol	51-28-5	330 U	330	1,100	1
10723	2,4-Dinitrotoluene	121-14-2	74 U	74	190	1
10723	2,6-Dinitrotoluene	606-20-2	19 U	19	37	1
10723	1,4-Dioxane	123-91-1	110 U	110	370	1
10723	Diphenyl ether	101-84-8	19 U	19	37	1
10723	1,2-Diphenylhydrazine	122-66-7	19 U	19	37	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	74 U	74	190	1
10723	Fluoranthene	206-44-0	4 U	4	19	1
10723	Fluorene	86-73-7	4 U	4	19	1
10723	Hexachlorobenzene	118-74-1	4 U	4	19	1
10723	Hexachlorobutadiene	87-68-3	19 U	19	37	1
10723	Hexachlorocyclopentadiene	77-47-4	190 U	190	560	1
10723	Hexachloroethane	67-72-1	37 U	37	190	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4 U	4	19	1
10723	Isophorone	78-59-1	19 U	19	37	1
10723	2-Methylnaphthalene	91-57-6	4 U	4	19	1
10723	2-Methylphenol	95-48-7	19 U	19	37	1
10723	4-Methylphenol	106-44-5	19 U	19	37	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	Naphthalene	91-20-3	6 J	4	19	1
10723	1-Naphthylamine	134-32-7	190 U	190	560	1
10723	2-Naphthylamine	91-59-8	190 U	190	560	1
10723	2-Nitroaniline	88-74-4	19 U	19	37	1
10723	3-Nitroaniline	99-09-2	74 U	74	190	1
10723	4-Nitroaniline	100-01-6	74 U	74	190	1
10723	Nitrobenzene	98-95-3	19 U	19	37	1

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.0-7.2) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296922
ELLE Group #: 1870508
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 15:55

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles		SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	2-Nitrophenol	88-75-5	19 U	19	37	1
10723	4-Nitrophenol	100-02-7	190 U	190	560	1
10723	N-Nitrosodimethylamine	62-75-9	74 U	74	190	1
10723	N-Nitroso-di-n-propylamine	621-64-7	19 U	19	37	1
10723	N-Nitrosodiphenylamine	86-30-6	19 U	19	37	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	74 U	74	190	1
10723	Parathion	56-38-2	190 U	190	560	1
10723	Pentachlorobenzene	608-93-5	19 U	19	37	1
10723	Pentachlorophenol	87-86-5	37 U	37	190	1
10723	Phenanthrene	85-01-8	4 U	4	19	1
10723	Phenol	108-95-2	20 J	19	37	1
10723	Pyrene	129-00-0	4 U	4	19	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	74 U	74	190	1
10723	o-Toluidine	95-53-4	220 U	220	740	1
10723	1,2,4-Trichlorobenzene	120-82-1	23 J	19	37	1
10723	2,4,5-Trichlorophenol	95-95-4	19 U	19	37	1
10723	2,4,6-Trichlorophenol	88-06-2	19 U	19	37	1

The project QA/QC requirements were not met.
Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg		
01643	Aluminum	7429-90-5	4,020	8.75	19.6	1
01650	Calcium	7440-70-2	155	3.26	19.6	1
01654	Iron	7439-89-6	4,310	7.88	19.6	1
01657	Magnesium	7439-95-4	197	2.38	9.79	1
01662	Potassium	7440-09-7	243	16.4	49.0	1
01667	Sodium	7440-23-5	92.7 J	16.4	97.9	1
06972	Zinc	7440-66-6	6.89	0.235	1.96	1
SW-846 6020		mg/kg	mg/kg	mg/kg		
06124	Antimony	7440-36-0	0.115 J	0.0913	0.196	2
The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.						
06125	Arsenic	7440-38-2	1.25	0.125	0.392	2
06126	Barium	7440-39-3	7.93	0.178	0.392	2
06127	Beryllium	7440-41-7	0.199	0.0103	0.0979	2

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.0-7.2) Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296922
ELLE Group #: 1870508
Matrix: Soil

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 15:55

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals			SW-846 6020	mg/kg	mg/kg	
06128	Cadmium	7440-43-9	0.0337 U	0.0337	0.0979	2
06131	Chromium	7440-47-3	11.2	0.170	0.392	2
06132	Cobalt	7440-48-4	1.71	0.0306	0.0979	2
06133	Copper	7440-50-8	5.79	0.105	0.392	2
06135	Lead	7439-92-1	3.05	0.0217	0.196	2
06137	Manganese	7439-96-5	12.0	0.177	0.392	2
06139	Nickel	7440-02-0	3.52	0.195	0.392	2
06141	Selenium	7782-49-2	0.0979 U	0.0979	0.392	2
06142	Silver	7440-22-4	0.0286 U	0.0286	0.0979	2
06145	Thallium	7440-28-0	0.0280 J	0.0245	0.0979	2
06148	Vanadium	7440-62-2	20.7	0.0417	0.0979	2
			SW-846 7471A	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0111 U	0.0111	0.111	1
Wet Chemistry			SW-846 9060A modified	mg/kg	mg/kg	
02079	Total Organic Carbon (TOC)	n.a.	331 J	118	355	1
Due to the nature of this sample matrix, the sample cup was filled to capacity with less than 1000 mg of sample being used. The lowered sample weight has resulted in a raised reporting limit.						
Wet Chemistry			SM 2540 G-1997	%	%	
			%Moisture Calc			
00111	Moisture	n.a.	11.2	0.50	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173131AA	11/09/2017 16:58	Linda C Pape	1
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173131AA	11/09/2017 16:58	Stephen C Nolte	1
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173162AA	11/12/2017 21:32	Stephen C Nolte	54.95
13101	Freons	SW-846 8260FRN Modified	1	J173141AA	11/10/2017 22:06	Patrick T Herres	0.99
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730747732	11/03/2017 13:06	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730747732	11/03/2017 13:07	Anastasia K Jaynes	n.a.

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.0-7.2) Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296922
ELLE Group #: 1870508
Matrix: Soil

Submission Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 15:55

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730747732	11/03/2017 13:07	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730747732	11/03/2017 13:08	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730747732	11/03/2017 13:05	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17314SLE026	11/13/2017 14:27	Linda M Hartenstine	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	17314SLE026	11/11/2017 08:00	David S Schrum	1
01643	Aluminum	SW-846 6010B	1	173100570805	11/12/2017 21:44	Elaine F Stoltzfus	1
01650	Calcium	SW-846 6010B	1	173100570805	11/14/2017 05:29	Jonathan J Allen	1
01654	Iron	SW-846 6010B	1	173100570805	11/12/2017 21:44	Elaine F Stoltzfus	1
01657	Magnesium	SW-846 6010B	1	173100570805	11/14/2017 05:29	Jonathan J Allen	1
01662	Potassium	SW-846 6010B	1	173100570805	11/12/2017 21:44	Elaine F Stoltzfus	1
01667	Sodium	SW-846 6010B	1	173100570805	11/12/2017 21:44	Elaine F Stoltzfus	1
06972	Zinc	SW-846 6010B	1	173100570805	11/12/2017 21:44	Elaine F Stoltzfus	1
06124	Antimony	SW-846 6020	1	173100570805A	11/13/2017 18:52	Bradley M Berlot	2
06125	Arsenic	SW-846 6020	1	173100570805A	11/13/2017 18:52	Bradley M Berlot	2
06126	Barium	SW-846 6020	1	173100570805D	11/13/2017 18:52	Bradley M Berlot	2
06127	Beryllium	SW-846 6020	1	173100570805A	11/13/2017 18:52	Bradley M Berlot	2
06128	Cadmium	SW-846 6020	1	173100570805A	11/13/2017 18:52	Bradley M Berlot	2
06131	Chromium	SW-846 6020	1	173100570805A	11/13/2017 18:52	Bradley M Berlot	2
06132	Cobalt	SW-846 6020	1	173100570805A	11/13/2017 18:52	Bradley M Berlot	2
06133	Copper	SW-846 6020	1	173100570805A	11/13/2017 18:52	Bradley M Berlot	2
06135	Lead	SW-846 6020	1	173100570805A	11/13/2017 18:52	Bradley M Berlot	2
06137	Manganese	SW-846 6020	1	173100570805A	11/13/2017 18:52	Bradley M Berlot	2
06139	Nickel	SW-846 6020	1	173100570805A	11/13/2017 18:52	Bradley M Berlot	2
06141	Selenium	SW-846 6020	1	173100570805B	11/13/2017 18:52	Bradley M Berlot	2
06142	Silver	SW-846 6020	1	173100570805A	11/13/2017 18:52	Bradley M Berlot	2
06145	Thallium	SW-846 6020	1	173100570805A	11/13/2017 18:52	Bradley M Berlot	2
06148	Vanadium	SW-846 6020	1	173100570805A	11/13/2017 18:52	Bradley M Berlot	2
00159	Mercury	SW-846 7471A	1	173100571105	11/09/2017 07:06	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173100570805	11/09/2017 05:21	James L Mertz	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173100571105	11/08/2017 19:45	Barbara A Kane	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667632A	11/14/2017 21:32	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820007B	11/06/2017 23:04	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: Lancaster Laboratories	Contract: _____	! _____ !
Lab Code: LANCAS	Case No.: _____	! D1502 !
Matrix: (soil/water) SOIL	SAS No.: _____	! _____ !
Sample wt/vol: 5.0 (g/mL) g	Lab Sample ID: 9296922	SDG No.: _____
Level: (low/med) LOW	Lab File ID: HP09193.i/17nov09a.b/xn09s13.d	
% Moisture: not dec. 11.2	Date Received: 11/02/17	
Column: (pack/cap) CAP	Date Analyzed: 11/09/17	
	Dilution Factor: 1.0	
	CONCENTRATION UNITS:	
	(ug/L or ug/Kg) ug/Kg	

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	VOCTIC		0	U
2.	Total VOC TICs			
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
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29.				
30.				

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: Lancaster Laboratories Contract: _____
 Lab Code: LANCAS Case No.: _____ SAS No.: _____
 Matrix: (soil/water) SOIL Lab Sample ID: 9296922
 Sample wt/vol: 30.4 (g/mL) g Lab File ID: ok0571.d
 Level: (low/med) LOW Date Received: 11/02/17
 % Moisture: 11.2 Decanted: (Y/N) Date Extracted: 11/11/17
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/13/17
 Injection Volume: 1 (uL) Dilution Factor: 1
 GPC Cleanup: N pH: _____ Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 24 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	!Unknown Aldol Condensate	2.999	400	JB
2.529-65-7	!Acetamide, N-ethyl-N-phenyl-	8.210	160	J
3.13798-23-7	!Hexathiane	8.439	170	J
4.	!Unknown	8.516	240	J
5.	!Unknown	9.792	500	J
6.	!Unknown	9.939	160	J
7.	!Unknown	9.975	160	J
8.	!Unknown	10.039	150	J
9.	!Unknown	10.116	180	J
10.	!Unknown PAH	10.222	240	J
11.	!Unknown	10.269	160	J
12.	!Unknown	10.322	240	J
13.	!Unknown acid	10.369	160	J
14.	!Unknown	10.445	520	J
15.	!Unknown	10.475	150	J
16.	!Unknown	10.504	370	J
17.	!Unknown	10.545	580	J
18.	!Unknown	10.610	370	J
19.	!Unknown	10.627	200	J
20.	!Unknown	10.680	660	J
21.	!Unknown	10.716	480	J
22.	!Unknown	10.751	610	J
23.10544-50-0	!Cyclic octaatomic sulfur	10.857	5200	J
24.80-05-7	!Phenol, 4,4'-(1-methylethyl)	11.174	200	J
25.	!	!	!	!
26.SVOCTIC	!Total SVOC TICs	!	12000	JB
27.	!	!	!	!
28.	!	!	!	!
29.	!	!	!	!
30.	!	!	!	!

Sample Description: D15-BOR-24-(7.2-7.7) Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296923
ELLE Group #: 1870508
Matrix: Soil

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 16:00

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	410 U	410	1,200	43.71
10237	Benzene	71-43-2	290 J	29	290	43.71
10237	Bromodichloromethane	75-27-4	58 U	58	290	43.71
10237	2-Butanone	78-93-3	230 U	230	580	43.71
10237	n-Butylbenzene	104-51-8	58 U	58	290	43.71
10237	sec-Butylbenzene	135-98-8	58 U	58	290	43.71
10237	tert-Butylbenzene	98-06-6	58 U	58	290	43.71
10237	Carbon Disulfide	75-15-0	58 U	58	290	43.71
10237	Carbon Tetrachloride	56-23-5	58 U	58	290	43.71
10237	Chlorobenzene	108-90-7	1,400	58	290	43.71
10237	Chloroethane	75-00-3	120 U	120	290	43.71
10237	Chloroform	67-66-3	61 J	58	290	43.71
10237	Chloromethane	74-87-3	120 U	120	290	43.71
10237	2-Chlorotoluene	95-49-8	58 U	58	290	43.71
10237	4-Chlorotoluene	106-43-4	58 U	58	290	43.71
10237	Chlorotrifluoroethene	79-38-9	120 U	120	290	43.71
10237	Dibromochloromethane	124-48-1	58 U	58	290	43.71
10237	1,2-Dibromoethane	106-93-4	58 U	58	290	43.71
10237	1,2-Dichlorobenzene	95-50-1	1,500	58	290	43.71
10237	1,3-Dichlorobenzene	541-73-1	75 J	58	290	43.71
10237	1,4-Dichlorobenzene	106-46-7	2,400	58	290	43.71
10237	Dichlorodifluoromethane	75-71-8	120 U	120	290	43.71
10237	1,1-Dichloroethane	75-34-3	58 U	58	290	43.71
10237	1,2-Dichloroethane	107-06-2	58 U	58	290	43.71
10237	1,1-Dichloroethene	75-35-4	58 U	58	290	43.71
10237	cis-1,2-Dichloroethene	156-59-2	58 U	58	290	43.71
10237	trans-1,2-Dichloroethene	156-60-5	58 U	58	290	43.71
10237	1,2-Dichloroethene (Total)	540-59-0	58 U	58	290	43.71
10237	Dichlorofluoromethane	75-43-4	120 U	120	290	43.71
10237	1,2-Dichloropropane	78-87-5	58 U	58	290	43.71
10237	1,1-Dichloropropene	563-58-6	58 U	58	290	43.71
10237	cis-1,3-Dichloropropene	10061-01-5	58 U	58	290	43.71
10237	Ethylbenzene	100-41-4	58 U	58	290	43.71
10237	Freon 113	76-13-1	120 U	120	580	43.71
10237	Freon 133a	75-88-7	120 U	120	290	43.71
10237	n-Hexane	110-54-3	58 U	58	290	43.71
10237	2-Hexanone	591-78-6	180 U	180	580	43.71
10237	Isobutyl Alcohol	78-83-1	5,800 U	5,800	15,000	43.71
10237	Isopropylbenzene	98-82-8	58 U	58	290	43.71
10237	p-Isopropyltoluene	99-87-6	58 U	58	290	43.71
10237	Methacrylonitrile	126-98-7	290 U	290	2,900	43.71
10237	Methyl Methacrylate	80-62-6	58 U	58	290	43.71

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.2-7.7) Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296923
ELLE Group #: 1870508
Matrix: Soil

Submission Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 16:00

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Methyl Tertiary Butyl Ether	1634-04-4	29 U	29	290	43.71
10237	4-Methyl-2-pentanone	108-10-1	180 U	180	580	43.71
10237	Methylene Chloride	75-09-2	120 U	120	290	43.71
10237	Propionitrile	107-12-0	1,800 U	1,800	5,800	43.71
10237	n-Propylbenzene	103-65-1	58 U	58	290	43.71
10237	Styrene	100-42-5	58 U	58	290	43.71
10237	1,1,1,2-Tetrachloroethane	630-20-6	58 U	58	290	43.71
10237	1,1,2,2-Tetrachloroethane	79-34-5	58 U	58	290	43.71
10237	Tetrachloroethene	127-18-4	58 U	58	290	43.71
10237	Tetrahydrofuran	109-99-9	230 U	230	470	43.71
10237	Toluene	108-88-3	150 J	58	290	43.71
10237	1,1,1-Trichloroethane	71-55-6	58 U	58	290	43.71
10237	1,1,2-Trichloroethane	79-00-5	58 U	58	290	43.71
10237	Trichloroethene	79-01-6	58 U	58	290	43.71
10237	Trichlorofluoromethane	75-69-4	120 U	120	290	43.71
10237	1,2,4-Trimethylbenzene	95-63-6	58 U	58	290	43.71
10237	1,3,5-Trimethylbenzene	108-67-8	58 U	58	290	43.71
10237	Vinyl Chloride	75-01-4	58 U	58	290	43.71
10237	m+p-Xylene	179601-23-1	130 J	58	290	43.71
10237	o-Xylene	95-47-6	58 U	58	290	43.71
10237	Xylene (Total)	1330-20-7	130 J	58	290	43.71

The project QA/QC requirements were not met.

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: chloroethane and 2-butanone.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg
13101	Chlorodifluoroethane	75-68-3	1 U	7
13101	Chlorodifluoromethane	75-45-6	3 U	7
13101	Chlorofluoromethane	593-70-4	1 U	7
13101	Chloropentafluoroethane	76-15-3	20 U	66
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1 U	7
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	7
13101	Dichlorotetrafluoroethane	76-14-2	3 U	7
13101	1,2-Dichlorotrifluoroethane	354-23-4	1 U	7
13101	Dichlorotrifluoroethane	306-83-2	1 U	7
13101	Fluoromethane	593-53-3	4 U	13
13101	Freon 113a	354-58-5	7 U	27
13101	1,1,2-Trifluoroethane	430-66-0	3 U	7

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.2-7.7) Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296923
ELLE Group #: 1870508
Matrix: Soil

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 16:00

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg	
13101	Vinyl fluoride	75-02-5	8 U	8	27	1

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	4 U	4	22	1
10723	Acenaphthylene	208-96-8	4 U	4	22	1
10723	Acetophenone	98-86-2	22 U	22	44	1
10723	4-Aminobiphenyl	92-67-1	220 U	220	660	1
10723	Aniline	62-53-3	220 U	220	660	1
10723	Anthracene	120-12-7	4 U	4	22	1
10723	Benzidine	92-87-5	330 U	330	660	1
10723	Benzo(a)anthracene	56-55-3	4 U	4	22	1
10723	Benzo(a)pyrene	50-32-8	4 U	4	22	1
10723	Benzo(b)fluoranthene	205-99-2	4 U	4	22	1
10723	Benzo(g,h,i)perylene	191-24-2	4 U	4	22	1
10723	Benzo(k)fluoranthene	207-08-9	4 U	4	22	1
10723	1,1'-Biphenyl	92-52-4	22 U	22	44	1
10723	4-Bromophenyl-phenylether	101-55-3	22 U	22	44	1
10723	Butylbenzylphthalate	85-68-7	88 U	88	220	1
10723	Di-n-butylphthalate	84-74-2	88 U	88	220	1
10723	Carbazole	86-74-8	22 U	22	44	1
10723	4-Chloro-3-methylphenol	59-50-7	22 U	22	44	1
10723	4-Chloroaniline	106-47-8	44 U	44	88	1
10723	bis(2-Chloroethoxy)methane	111-91-1	22 U	22	44	1
10723	bis(2-Chloroethyl)ether	111-44-4	22 U	22	44	1
10723	2-Chloronaphthalene	91-58-7	9 U	9	44	1
10723	2-Chlorophenol	95-57-8	91	22	44	1
10723	4-Chlorophenyl-phenylether	7005-72-3	22 U	22	44	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	22 U	22	44	1
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4 U	4	22	1
10723	Dibenz(a,h)anthracene	53-70-3	4 U	4	22	1
10723	Dibenzofuran	132-64-9	22 U	22	44	1
10723	3,3'-Dichlorobenzidine	91-94-1	130 U	130	440	1
10723	2,4-Dichlorophenol	120-83-2	22 U	22	44	1
10723	Diethylphthalate	84-66-2	88 U	88	220	1

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.2-7.7) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296923
ELLE Group #: 1870508
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 16:00

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles		SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	2,4-Dimethylphenol	105-67-9	22 U	22	44	1
10723	Dimethylphthalate	131-11-3	88 U	88	220	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	220 U	220	660	1
10723	2,4-Dinitrophenol	51-28-5	390 U	390	1,300	1
10723	2,4-Dinitrotoluene	121-14-2	88 U	88	220	1
10723	2,6-Dinitrotoluene	606-20-2	22 U	22	44	1
10723	1,4-Dioxane	123-91-1	130 U	130	440	1
10723	Diphenyl ether	101-84-8	22 U	22	44	1
10723	1,2-Diphenylhydrazine	122-66-7	22 U	22	44	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	88 U	88	220	1
10723	Fluoranthene	206-44-0	4 U	4	22	1
10723	Fluorene	86-73-7	4 U	4	22	1
10723	Hexachlorobenzene	118-74-1	4 U	4	22	1
10723	Hexachlorobutadiene	87-68-3	22 U	22	44	1
10723	Hexachlorocyclopentadiene	77-47-4	220 U	220	660	1
10723	Hexachloroethane	67-72-1	44 U	44	220	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4 U	4	22	1
10723	Isophorone	78-59-1	22 U	22	44	1
10723	2-Methylnaphthalene	91-57-6	4 U	4	22	1
10723	2-Methylphenol	95-48-7	22 U	22	44	1
10723	4-Methylphenol	106-44-5	22 U	22	44	1
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	Naphthalene	91-20-3	23	4	22	1
10723	1-Naphthylamine	134-32-7	220 U	220	660	1
10723	2-Naphthylamine	91-59-8	220 U	220	660	1
10723	2-Nitroaniline	88-74-4	22 U	22	44	1
10723	3-Nitroaniline	99-09-2	88 U	88	220	1
10723	4-Nitroaniline	100-01-6	88 U	88	220	1
10723	Nitrobenzene	98-95-3	22 U	22	44	1
10723	2-Nitrophenol	88-75-5	22 U	22	44	1
10723	4-Nitrophenol	100-02-7	220 U	220	660	1
10723	N-Nitrosodimethylamine	62-75-9	88 U	88	220	1
10723	N-Nitroso-di-n-propylamine	621-64-7	22 U	22	44	1
10723	N-Nitrosodiphenylamine	86-30-6	22 U	22	44	1
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	88 U	88	220	1
10723	Parathion	56-38-2	220 U	220	660	1
10723	Pentachlorobenzene	608-93-5	22 U	22	44	1
10723	Pentachlorophenol	87-86-5	44 U	44	220	1

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.2-7.7) Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296923
ELLE Group #: 1870508
Matrix: Soil

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 16:00

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	
10723	Phenanthrene	85-01-8	4 U	4	22	1
10723	Phenol	108-95-2	80	22	44	1
10723	Pyrene	129-00-0	4 U	4	22	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	88 U	88	220	1
10723	o-Toluidine	95-53-4	260 U	260	880	1
10723	1,2,4-Trichlorobenzene	120-82-1	90	22	44	1
10723	2,4,5-Trichlorophenol	95-95-4	22 U	22	44	1
10723	2,4,6-Trichlorophenol	88-06-2	22 U	22	44	1

The project QA/QC requirements were not met.
Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg		
01643	Aluminum	7429-90-5	18,200	9.70	21.7	1
01650	Calcium	7440-70-2	839	3.61	21.7	1
01654	Iron	7439-89-6	48,600	43.7	109	5
01657	Magnesium	7439-95-4	818	2.64	10.9	1
01662	Potassium	7440-09-7	913	18.1	54.3	1
01667	Sodium	7440-23-5	281	18.1	109	1
06972	Zinc	7440-66-6	32.7	0.261	2.17	1
SW-846 6020			mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.105 J	0.101	0.217	2
The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.						
06125	Arsenic	7440-38-2	9.07	0.139	0.434	2
06126	Barium	7440-39-3	71.3	0.197	0.434	2
06127	Beryllium	7440-41-7	1.30	0.0114	0.109	2
06128	Cadmium	7440-43-9	0.0475 J	0.0373	0.109	2
06131	Chromium	7440-47-3	42.7	0.189	0.434	2
06132	Cobalt	7440-48-4	9.79	0.0339	0.109	2
06133	Copper	7440-50-8	37.0	0.116	0.434	2
06135	Lead	7439-92-1	11.2	0.0241	0.217	2
06137	Manganese	7439-96-5	66.5	0.196	0.434	2
06139	Nickel	7440-02-0	13.1	0.216	0.434	2
06141	Selenium	7782-49-2	0.300 J	0.109	0.434	2
06142	Silver	7440-22-4	0.0469 J	0.0317	0.109	2
06145	Thallium	7440-28-0	0.198	0.0271	0.109	2
06148	Vanadium	7440-62-2	52.9	0.0462	0.109	2

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.2-7.7) Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296923
ELLE Group #: 1870508
Matrix: Soil

Submission Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 16:00

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals		SW-846 7471A	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0288 J	0.0129	0.129	1
Wet Chemistry		SW-846 9060A modified	mg/kg	mg/kg	mg/kg	
02079	Total Organic Carbon (TOC)	n.a.	2,650	235	705	1
Wet Chemistry		SM 2540 G-1997	%	%	%	
	%Moisture Calc					
00111	Moisture	n.a.	25.1	0.50	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173162AA	11/13/2017 01:10	Stephen C Nolte	43.71
13101	Freons	SW-846 8260FRN Modified	1	J173141AA	11/11/2017 01:35	Patrick T Herres	1
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730747732	11/03/2017 13:15	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730747732	11/03/2017 13:15	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730747732	11/03/2017 13:17	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730747732	11/03/2017 13:17	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730747732	11/03/2017 13:11	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17314SLE026	11/13/2017 14:49	Linda M Hartenstine	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	17314SLE026	11/11/2017 08:00	David S Schrum	1
01643	Aluminum	SW-846 6010B	1	173100570805	11/12/2017 21:55	Elaine F Stoltzfus	1
01650	Calcium	SW-846 6010B	1	173100570805	11/12/2017 21:55	Elaine F Stoltzfus	1
01654	Iron	SW-846 6010B	1	173100570805	11/14/2017 05:33	Jonathan J Allen	5
01657	Magnesium	SW-846 6010B	1	173100570805	11/12/2017 21:55	Elaine F Stoltzfus	1
01662	Potassium	SW-846 6010B	1	173100570805	11/12/2017 21:55	Elaine F Stoltzfus	1
01667	Sodium	SW-846 6010B	1	173100570805	11/12/2017 21:55	Elaine F Stoltzfus	1
06972	Zinc	SW-846 6010B	1	173100570805	11/12/2017 21:55	Elaine F Stoltzfus	1
06124	Antimony	SW-846 6020	1	173100570805A	11/13/2017 19:01	Bradley M Berlot	2
06125	Arsenic	SW-846 6020	1	173100570805A	11/13/2017 19:01	Bradley M Berlot	2
06126	Barium	SW-846 6020	1	173100570805D	11/13/2017 19:01	Bradley M Berlot	2
06127	Beryllium	SW-846 6020	1	173100570805A	11/13/2017 19:01	Bradley M Berlot	2
06128	Cadmium	SW-846 6020	1	173100570805A	11/13/2017 19:01	Bradley M Berlot	2
06131	Chromium	SW-846 6020	1	173100570805A	11/13/2017 19:01	Bradley M Berlot	2
06132	Cobalt	SW-846 6020	1	173100570805A	11/13/2017 19:01	Bradley M Berlot	2
06133	Copper	SW-846 6020	1	173100570805A	11/13/2017 19:01	Bradley M Berlot	2

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-24-(7.2-7.7) Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submission Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 16:00

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9296923
ELLE Group #: 1870508
Matrix: Soil

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06135	Lead	SW-846 6020	1	173100570805A	11/13/2017 19:01	Bradley M Berlot	2
06137	Manganese	SW-846 6020	1	173100570805A	11/13/2017 19:01	Bradley M Berlot	2
06139	Nickel	SW-846 6020	1	173100570805A	11/13/2017 19:01	Bradley M Berlot	2
06141	Selenium	SW-846 6020	1	173100570805B	11/13/2017 19:01	Bradley M Berlot	2
06142	Silver	SW-846 6020	1	173100570805A	11/13/2017 19:01	Bradley M Berlot	2
06145	Thallium	SW-846 6020	1	173100570805A	11/13/2017 19:01	Bradley M Berlot	2
06148	Vanadium	SW-846 6020	1	173100570805A	11/13/2017 19:01	Bradley M Berlot	2
00159	Mercury	SW-846 7471A	1	173100571105	11/09/2017 07:08	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173100570805	11/09/2017 05:21	James L Mertz	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173100571105	11/08/2017 19:45	Barbara A Kane	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667632A	11/14/2017 22:11	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820007B	11/06/2017 23:04	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: Lancaster Laboratories	Contract: _____	! _____ !
Lab Code: LANCAS	Case No.: _____	! D1503 !
Matrix: (soil/water) SOIL	SAS No.: _____	! _____ !
Sample wt/vol: 5.72 (g/mL) g	Lab Sample ID: 9296923	SDG No.: _____
Level: (low/med) MED	Lab File ID: HP07566.i/17nov12a.b/rn12s41.d	
% Moisture: not dec. 25.1	Date Received: 11/02/17	
Column: (pack/cap) CAP	Date Analyzed: 11/13/17	
	Dilution Factor: 43.7	
	CONCENTRATION UNITS:	
	(ug/L or ug/Kg) ug/Kg	

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	VOCTIC		0	U
2.	Total VOC TICs			
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
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26.				
27.				
28.				
29.				
30.				

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: Lancaster Laboratories Contract: _____
 Lab Code: LANCAS Case No.: _____ SAS No.: _____
 Matrix: (soil/water) SOIL Lab Sample ID: 9296923
 Sample wt/vol: 30.5 (g/mL) g Lab File ID: ok0572.d
 Level: (low/med) LOW Date Received: 11/02/17
 % Moisture: 25.1 Decanted: (Y/N) Date Extracted: 11/11/17
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/13/17
 Injection Volume: 1 (uL) Dilution Factor: 1
 GPC Cleanup: N pH: _____ Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 20 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	!Unknown Aldol Condensate	2.992	370	JB
2.13798-23-7	!Hexathiane	8.439	580	J
3.	!Unknown	8.516	200	J
4.	!Unknown	9.474	240	J
5.	!Unknown	9.780	400	J
6.244-99-5	!5H-Indeno[1,2-b]pyridine	9.910	310	J
7.	!Unknown	9.968	180	J
8.	!Unknown	10.157	210	J
9.	!Unknown	10.292	240	J
10.57-10-3	!n-Hexadecanoic acid	10.327	580	J
11.	!Unknown	10.374	200	J
12.	!Unknown	10.410	260	J
13.135-88-6	!2-Naphthalenamine, N-phenyl-	10.445	440	J
14.	!Unknown	10.539	800	J
15.	!Unknown	10.580	520	J
16.	!Unknown	10.598	240	J
17.	!Unknown	10.645	760	J
18.10544-50-0	!Cyclic octaatomic sulfur	10.857	8600	J
19.57-11-4	!Octadecanoic acid	11.092	190	J
20.80-05-7	!Phenol, 4,4'-(1-methylethyl)	11.174	520	J
21.	!	!	!	!
22.SVOCTIC	!Total SVOC TICs	!	16000	JB
23.	!	!	!	!
24.	!	!	!	!
25.	!	!	!	!
26.	!	!	!	!
27.	!	!	!	!
28.	!	!	!	!
29.	!	!	!	!
30.	!	!	!	!

Sample Description: CWKDERIVER3-TBLK-2 Blank Water
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9296924
ELLE Group #: 1870508
Matrix: Blank Water

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 08:45

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260B	ug/l	ug/l	ug/l	
10335	Acetone	67-64-1	6 U	6	20	1
10335	Benzene	71-43-2	0.5 U	0.5	1	1
10335	Bromodichloromethane	75-27-4	0.5 U	0.5	1	1
10335	2-Butanone	78-93-3	3 U	3	10	1
10335	n-Butylbenzene	104-51-8	1 U	1	5	1
10335	sec-Butylbenzene	135-98-8	1 U	1	5	1
10335	tert-Butylbenzene	98-06-6	1 U	1	5	1
10335	Carbon Disulfide	75-15-0	1 U	1	5	1
10335	Carbon Tetrachloride	56-23-5	0.5 U	0.5	1	1
10335	Chlorobenzene	108-90-7	0.5 U	0.5	1	1
10335	Chloroethane	75-00-3	0.5 U	0.5	1	1
10335	Chloroform	67-66-3	0.5 U	0.5	1	1
10335	Chloromethane	74-87-3	0.5 U	0.5	1	1
10335	2-Chlorotoluene	95-49-8	1 U	1	5	1
10335	4-Chlorotoluene	106-43-4	1 U	1	5	1
10335	Chlorotrifluoroethene	79-38-9	2 U	2	5	1
10335	Dibromochloromethane	124-48-1	0.5 U	0.5	1	1
10335	1,2-Dibromoethane	106-93-4	0.5 U	0.5	1	1
10335	1,2-Dichlorobenzene	95-50-1	1 U	1	5	1
10335	1,3-Dichlorobenzene	541-73-1	1 U	1	5	1
10335	1,4-Dichlorobenzene	106-46-7	1 U	1	5	1
10335	Dichlorodifluoromethane	75-71-8	0.5 U	0.5	1	1
10335	1,1-Dichloroethane	75-34-3	0.5 U	0.5	1	1
10335	1,2-Dichloroethane	107-06-2	0.5 U	0.5	1	1
10335	1,1-Dichloroethene	75-35-4	0.5 U	0.5	1	1
10335	cis-1,2-Dichloroethene	156-59-2	0.5 U	0.5	1	1
10335	trans-1,2-Dichloroethene	156-60-5	0.5 U	0.5	1	1
10335	1,2-Dichloroethene (Total)	540-59-0	0.5 U	0.5	1	1
10335	Dichlorofluoromethane	75-43-4	0.5 U	0.5	1	1
10335	1,2-Dichloropropane	78-87-5	0.5 U	0.5	1	1
10335	1,1-Dichloropropene	563-58-6	1 U	1	5	1
10335	cis-1,3-Dichloropropene	10061-01-5	0.5 U	0.5	1	1
10335	Ethylbenzene	100-41-4	0.5 U	0.5	1	1
10335	Freon 113	76-13-1	2 U	2	10	1
10335	Freon 133a	75-88-7	2 U	2	5	1
10335	n-Hexane	110-54-3	2 U	2	5	1
10335	2-Hexanone	591-78-6	3 U	3	10	1
10335	Isobutyl Alcohol	78-83-1	100 U	100	250	1
10335	Isopropylbenzene	98-82-8	1 U	1	5	1
10335	p-Isopropyltoluene	99-87-6	1 U	1	5	1
10335	Methacrylonitrile	126-98-7	10 U	10	50	1
10335	Methyl Methacrylate	80-62-6	1 U	1	5	1

*=This limit was used in the evaluation of the final result

Sample Description: CWKDERIVER3-TBLK-2 Blank Water
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9296924
ELLE Group #: 1870508
Matrix: Blank Water

Submittal Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 08:45

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260B	ug/l	ug/l	ug/l	
10335	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	1	1
10335	4-Methyl-2-pentanone	108-10-1	3 U	3	10	1
10335	Methylene Chloride	75-09-2	0.5 U	0.5	1	1
10335	Propionitrile	107-12-0	30 U	30	100	1
10335	n-Propylbenzene	103-65-1	1 U	1	5	1
10335	Styrene	100-42-5	1 U	1	5	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	0.5 U	0.5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	0.5 U	0.5	1	1
10335	Tetrachloroethene	127-18-4	0.5 U	0.5	1	1
10335	Tetrahydrofuran	109-99-9	4 U	4	10	1
10335	Toluene	108-88-3	0.5 U	0.5	1	1
10335	1,1,1-Trichloroethane	71-55-6	0.5 U	0.5	1	1
10335	1,1,2-Trichloroethane	79-00-5	0.5 U	0.5	1	1
10335	Trichloroethene	79-01-6	0.5 U	0.5	1	1
10335	Trichlorofluoromethane	75-69-4	0.5 U	0.5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5	1
10335	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5	1
10335	Vinyl Chloride	75-01-4	0.5 U	0.5	1	1
10335	m+p-Xylene	179601-23-1	0.5 U	0.5	1	1
10335	o-Xylene	95-47-6	0.5 U	0.5	1	1
10335	Xylene (Total)	1330-20-7	0.5 U	0.5	1	1

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The NJ DKQP required reporting limit could not be attained for 1,2-Dibromoethane.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/l	ug/l	ug/l
13066	Chlorodifluoroethane	75-68-3	1 UZ	5
13066	Chlorodifluoromethane	75-45-6	2 U	5
13066	Chlorofluoromethane	593-70-4	1 U	5
13066	Chloropentafluoroethane	76-15-3	15 U	50
13066	1,1-Dichloro-1-fluoroethane	1717-00-6	1 U	5
13066	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	5
13066	Dichlorotetrafluoroethane	76-14-2	2 U	5
13066	1,2-Dichlorotrifluoroethane	354-23-4	1 U	5
13066	Dichlorotrifluoroethane	306-83-2	1 U	5
13066	Fluoromethane	593-53-3	3 U	10
13066	Freon 113a	354-58-5	5 U	20
13066	1,1,2-Trifluoroethane	430-66-0	2 U	5
13066	Vinyl fluoride	75-02-5	2 U	10

*=This limit was used in the evaluation of the final result

Sample Description: CWKDERIVER3-TBLK-2 Blank Water
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submission Date/Time: 11/02/2017 09:40
Collection Date/Time: 11/01/2017 08:45

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9296924
ELLE Group #: 1870508
Matrix: Blank Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
	Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.					

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	Y173141AA	11/10/2017 10:30	Anita M Dale	1
13066	Freons	SW-846 8260FRN Modified	1	J173111AA	11/07/2017 15:01	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y173141AA	11/10/2017 10:30	Anita M Dale	1

*=This limit was used in the evaluation of the final result

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: Lancaster Laboratories	Contract: _____	! _____ !
Lab Code: LANCAS	SAS No.: _____	! D1504 !
Case No.: _____	SDG No.: _____	! _____ !
Matrix: (soil/water) WATER	Lab Sample ID: 9296924	
Sample wt/vol: 5.0 (g/mL)mL	Lab File ID:HP09355.i/17nov10a.b/yn10s05.d	
Level: (low/med) LOW	Date Received: 11/02/17	
% Moisture: not dec.	Date Analyzed: 11/10/17	
Column: (pack/cap) CAP	Dilution Factor: 1.0	
	CONCENTRATION UNITS:	
	(ug/L or ug/Kg) ug/L	

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
2.				
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page 1 of 1

FORM I VOA-TIC

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL**	LOQ
	ug/kg	ug/kg	ug/kg
Batch number: J173141AA	Sample number(s): 9296921-9296923		
Chlorodifluoroethane	1 U	1	5
Chlorodifluoromethane	2 U	2	5
Chlorofluoromethane	1 U	1	5
Chloropentafluoroethane	15 U	15	50
1,1-Dichloro-1-fluoroethane	1 U	1	5
1,2-Dichloro-1-fluoroethane	1 U	1	5
Dichlorotetrafluoroethane	2 U	2	5
1,2-Dichlorotrifluoroethane	1 U	1	5
Dichlorotrifluoroethane	1 U	1	5
Fluoromethane	3 U	3	10
Freon 113a	5 U	5	20
1,1,2-Trifluoroethane	2 U	2	5
Vinyl fluoride	6 U	6	20
Batch number: R173162AA	Sample number(s): 9296921-9296923		
Acetone	350 U	350	1,000
Benzene	25 U	25	250
Bromodichloromethane	50 U	50	250
2-Butanone	200 U	200	500
n-Butylbenzene	50 U	50	250
sec-Butylbenzene	50 U	50	250
tert-Butylbenzene	50 U	50	250
Carbon Disulfide	50 U	50	250
Carbon Tetrachloride	50 U	50	250
Chlorobenzene	50 U	50	250
Chloroethane	100 U	100	250
Chloroform	50 U	50	250
Chloromethane	100 U	100	250
2-Chlorotoluene	50 U	50	250
4-Chlorotoluene	50 U	50	250
Chlorotrifluoroethene	100 U	100	250
Dibromochloromethane	50 U	50	250
1,2-Dibromoethane	50 U	50	250
1,2-Dichlorobenzene	50 U	50	250
1,3-Dichlorobenzene	50 U	50	250
1,4-Dichlorobenzene	50 U	50	250
Dichlorodifluoromethane	100 U	100	250
1,1-Dichloroethane	50 U	50	250
1,2-Dichloroethane	50 U	50	250

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/kg	ug/kg	ug/kg
1,1-Dichloroethene	50 U	50	250
cis-1,2-Dichloroethene	50 U	50	250
trans-1,2-Dichloroethene	50 U	50	250
1,2-Dichloroethene (Total)	50 U	50	250
Dichlorofluoromethane	100 U	100	250
1,2-Dichloropropane	50 U	50	250
1,1-Dichloropropene	50 U	50	250
cis-1,3-Dichloropropene	50 U	50	250
Ethylbenzene	50 U	50	250
Freon 113	100 U	100	500
Freon 133a	100 U	100	250
n-Hexane	50 U	50	250
2-Hexanone	150 U	150	500
Isobutyl Alcohol	5,000 U	5,000	13,000
Isopropylbenzene	50 U	50	250
p-Isopropyltoluene	50 U	50	250
Methacrylonitrile	250 U	250	2,500
Methyl Methacrylate	50 U	50	250
Methyl Tertiary Butyl Ether	25 U	25	250
4-Methyl-2-pentanone	150 U	150	500
Methylene Chloride	100 U	100	250
Propionitrile	1,500 U	1,500	5,000
n-Propylbenzene	50 U	50	250
Styrene	50 U	50	250
1,1,1,2-Tetrachloroethane	50 U	50	250
1,1,2,2-Tetrachloroethane	50 U	50	250
Tetrachloroethene	50 U	50	250
Tetrahydrofuran	200 U	200	400
Toluene	50 U	50	250
1,1,1-Trichloroethane	50 U	50	250
1,1,2-Trichloroethane	50 U	50	250
Trichloroethene	50 U	50	250
Trichlorofluoromethane	100 U	100	250
1,2,4-Trimethylbenzene	50 U	50	250
1,3,5-Trimethylbenzene	50 U	50	250
Vinyl Chloride	50 U	50	250
m+p-Xylene	50 U	50	250
o-Xylene	50 U	50	250
Xylene (Total)	50 U	50	250
Batch number: X173131AA	Sample number(s): 9296922		
Acetone	7 U	7	20
Benzene	0.5 U	0.5	5
Bromodichloromethane	1 U	1	5
2-Butanone	4 U	4	10

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/kg	ug/kg	ug/kg
n-Butylbenzene	1 U	1	5
sec-Butylbenzene	1 U	1	5
tert-Butylbenzene	1 U	1	5
Carbon Disulfide	1 U	1	5
Carbon Tetrachloride	1 U	1	5
Chloroethane	2 U	2	5
Chloroform	1 U	1	5
Chloromethane	2 U	2	5
2-Chlorotoluene	1 U	1	5
4-Chlorotoluene	1 U	1	5
Chlorotrifluoroethene	2 U	2	5
Dibromochloromethane	1 U	1	5
1,2-Dibromoethane	1 U	1	5
1,3-Dichlorobenzene	1 U	1	5
Dichlorodifluoromethane	2 U	2	5
1,1-Dichloroethane	1 U	1	5
1,2-Dichloroethane	1 U	1	5
1,1-Dichloroethene	1 U	1	5
cis-1,2-Dichloroethene	1 U	1	5
trans-1,2-Dichloroethene	1 U	1	5
1,2-Dichloroethene (Total)	1 U	1	5
Dichlorofluoromethane	2 U	2	5
1,2-Dichloropropane	1 U	1	5
1,1-Dichloropropene	1 U	1	5
cis-1,3-Dichloropropene	1 U	1	5
Ethylbenzene	1 U	1	5
Freon 113	2 U	2	10
Freon 133a	2 U	2	5
n-Hexane	1 U	1	5
2-Hexanone	3 U	3	10
Isobutyl Alcohol	100 U	100	250
Isopropylbenzene	1 U	1	5
p-Isopropyltoluene	1 U	1	5
Methacrylonitrile	5 U	5	50
Methyl Methacrylate	1 U	1	5
Methyl Tertiary Butyl Ether	0.5 U	0.5	5
4-Methyl-2-pentanone	3 U	3	10
Methylene Chloride	2 U	2	5
Propionitrile	30 U	30	100
n-Propylbenzene	1 U	1	5
Styrene	1 U	1	5
1,1,1,2-Tetrachloroethane	1 U	1	5
1,1,2,2-Tetrachloroethane	1 U	1	5
Tetrachloroethene	1 U	1	5
Tetrahydrofuran	4 U	4	8

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/kg	ug/kg	ug/kg
Toluene	1 U	1	5
1,1,1-Trichloroethane	1 U	1	5
1,1,2-Trichloroethane	1 U	1	5
Trichloroethene	1 U	1	5
Trichlorofluoromethane	2 U	2	5
1,2,4-Trimethylbenzene	1 U	1	5
1,3,5-Trimethylbenzene	1 U	1	5
Vinyl Chloride	1 U	1	5
m+p-Xylene	1 U	1	5
o-Xylene	1 U	1	5
Xylene (Total)	1 U	1	5
	ug/l	ug/l	ug/l
Batch number: J173111AA	Sample number(s): 9296924		
Chlorodifluoroethane	1 U	1	5
Chlorodifluoromethane	2 U	2	5
Chlorofluoromethane	1 U	1	5
Chloropentafluoroethane	15 U	15	50
1,1-Dichloro-1-fluoroethane	1 U	1	5
1,2-Dichloro-1-fluoroethane	1 U	1	5
Dichlorotetrafluoroethane	2 U	2	5
1,2-Dichlorotrifluoroethane	1 U	1	5
Dichlorotrifluoroethane	1 U	1	5
Fluoromethane	3 U	3	10
Freon 113a	5 U	5	20
1,1,2-Trifluoroethane	2 U	2	5
Vinyl fluoride	2 U	2	10
Batch number: Y173141AA	Sample number(s): 9296924		
Acetone	6 U	6	20
Benzene	0.5 U	0.5	1
Bromodichloromethane	0.5 U	0.5	1
2-Butanone	3 U	3	10
n-Butylbenzene	1 U	1	5
sec-Butylbenzene	1 U	1	5
tert-Butylbenzene	1 U	1	5
Carbon Disulfide	1 U	1	5
Carbon Tetrachloride	0.5 U	0.5	1
Chlorobenzene	0.5 U	0.5	1
Chloroethane	0.5 U	0.5	1
Chloroform	0.5 U	0.5	1
Chloromethane	0.5 U	0.5	1
2-Chlorotoluene	1 U	1	5
4-Chlorotoluene	1 U	1	5
Chlorotrifluoroethene	2 U	2	5
Dibromochloromethane	0.5 U	0.5	1

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
1,2-Dibromoethane	0.5 U	0.5	1
1,2-Dichlorobenzene	1 U	1	5
1,3-Dichlorobenzene	1 U	1	5
1,4-Dichlorobenzene	1 U	1	5
Dichlorodifluoromethane	0.5 U	0.5	1
1,1-Dichloroethane	0.5 U	0.5	1
1,2-Dichloroethane	0.5 U	0.5	1
1,1-Dichloroethene	0.5 U	0.5	1
cis-1,2-Dichloroethene	0.5 U	0.5	1
trans-1,2-Dichloroethene	0.5 U	0.5	1
1,2-Dichloroethene (Total)	0.5 U	0.5	1
Dichlorofluoromethane	0.5 U	0.5	1
1,2-Dichloropropane	0.5 U	0.5	1
1,1-Dichloropropene	1 U	1	5
cis-1,3-Dichloropropene	0.5 U	0.5	1
Ethylbenzene	0.5 U	0.5	1
Freon 113	2 U	2	10
Freon 133a	2 U	2	5
n-Hexane	2 U	2	5
2-Hexanone	3 U	3	10
Isobutyl Alcohol	100 U	100	250
Isopropylbenzene	1 U	1	5
p-Isopropyltoluene	1 U	1	5
Methacrylonitrile	10 U	10	50
Methyl Methacrylate	1 U	1	5
Methyl Tertiary Butyl Ether	0.5 U	0.5	1
4-Methyl-2-pentanone	3 U	3	10
Methylene Chloride	0.5 U	0.5	1
Propionitrile	30 U	30	100
n-Propylbenzene	1 U	1	5
Styrene	1 U	1	5
1,1,1,2-Tetrachloroethane	0.5 U	0.5	1
1,1,2,2-Tetrachloroethane	0.5 U	0.5	1
Tetrachloroethene	0.5 U	0.5	1
Tetrahydrofuran	4 U	4	10
Toluene	0.5 U	0.5	1
1,1,1-Trichloroethane	0.5 U	0.5	1
1,1,2-Trichloroethane	0.5 U	0.5	1
Trichloroethene	0.5 U	0.5	1
Trichlorofluoromethane	0.5 U	0.5	1
1,2,4-Trimethylbenzene	1 U	1	5
1,3,5-Trimethylbenzene	1 U	1	5
Vinyl Chloride	0.5 U	0.5	1
m+p-Xylene	0.5 U	0.5	1
o-Xylene	0.5 U	0.5	1

*- Outside of specification

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Xylene (Total)	0.5 U	0.5	1
	ug/kg	ug/kg	ug/kg
Batch number: 17314SLE026	Sample number(s): 9296921-9296923		
Acenaphthene	3 U	3	17
Acenaphthylene	3 U	3	17
Acetophenone	17 U	17	33
4-Aminobiphenyl	170 U	170	500
Aniline	170 U	170	500
Anthracene	3 U	3	17
Benidine	250 U	250	500
Benzo(a)anthracene	3 U	3	17
Benzo(a)pyrene	3 U	3	17
Benzo(b)fluoranthene	3 U	3	17
Benzo(g,h,i)perylene	3 U	3	17
Benzo(k)fluoranthene	3 U	3	17
1,1'-Biphenyl	17 U	17	33
4-Bromophenyl-phenylether	17 U	17	33
Butylbenzylphthalate	67 U	67	170
Di-n-butylphthalate	67 U	67	170
Carbazole	17 U	17	33
4-Chloro-3-methylphenol	17 U	17	33
4-Chloroaniline	33 U	33	67
bis(2-Chloroethoxy)methane	17 U	17	33
bis(2-Chloroethyl)ether	17 U	17	33
2-Chloronaphthalene	7 U	7	33
2-Chlorophenol	17 U	17	33
4-Chlorophenyl-phenylether	17 U	17	33
2,2'-oxybis(1-Chloropropane)	17 U	17	33
Chrysene	3 U	3	17
Dibenz(a,h)anthracene	3 U	3	17
Dibenzofuran	17 U	17	33
3,3'-Dichlorobenzidine	100 U	100	330
2,4-Dichlorophenol	17 U	17	33
Diethylphthalate	67 U	67	170
2,4-Dimethylphenol	17 U	17	33
Dimethylphthalate	67 U	67	170
4,6-Dinitro-2-methylphenol	170 U	170	500
2,4-Dinitrophenol	300 U	300	1,000
2,4-Dinitrotoluene	67 U	67	170
2,6-Dinitrotoluene	17 U	17	33
1,4-Dioxane	100 U	100	330
Diphenyl ether	17 U	17	33
1,2-Diphenylhydrazine	17 U	17	33
bis(2-Ethylhexyl)phthalate	67 U	67	170

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/kg	ug/kg	ug/kg
Fluoranthene	3 U	3	17
Fluorene	3 U	3	17
Hexachlorobenzene	3 U	3	17
Hexachlorobutadiene	17 U	17	33
Hexachlorocyclopentadiene	170 U	170	500
Hexachloroethane	33 U	33	170
Indeno(1,2,3-cd)pyrene	3 U	3	17
Isophorone	17 U	17	33
2-Methylnaphthalene	3 U	3	17
2-Methylphenol	17 U	17	33
4-Methylphenol	17 U	17	33
Naphthalene	3 U	3	17
1-Naphthylamine	170 U	170	500
2-Naphthylamine	170 U	170	500
2-Nitroaniline	17 U	17	33
3-Nitroaniline	67 U	67	170
4-Nitroaniline	67 U	67	170
Nitrobenzene	17 U	17	33
2-Nitrophenol	17 U	17	33
4-Nitrophenol	170 U	170	500
N-Nitrosodimethylamine	67 U	67	170
N-Nitroso-di-n-propylamine	17 U	17	33
N-Nitrosodiphenylamine	17 U	17	33
Di-n-octylphthalate	67 U	67	170
Parathion	170 U	170	500
Pentachlorobenzene	17 U	17	33
Pentachlorophenol	33 U	33	170
Phenanthrene	3 U	3	17
Phenol	17 U	17	33
Pyrene	3 U	3	17
2,3,4,6-Tetrachlorophenol	67 U	67	170
o-Toluidine	200 U	200	670
1,2,4-Trichlorobenzene	17 U	17	33
2,4,5-Trichlorophenol	17 U	17	33
2,4,6-Trichlorophenol	17 U	17	33
	mg/kg	mg/kg	mg/kg
Batch number: 173100570805	Sample number(s): 9296921-9296923		
Aluminum	16.0 J	8.94	20.0
Calcium	3.33 U	3.33	20.0
Iron	8.05 U	8.05	20.0
Magnesium	2.43 U	2.43	10.0
Potassium	16.7 U	16.7	50.0
Sodium	30.1 J	16.7	100
Zinc	0.240 U	0.240	2.00

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	mg/kg	mg/kg	mg/kg
Batch number: 173100570805A	Sample number(s): 9296921-9296923		
Antimony	0.0932 U	0.0932	0.200
Arsenic	0.128 U	0.128	0.400
Beryllium	0.0105 U	0.0105	0.100
Cadmium	0.0344 U	0.0344	0.100
Chromium	0.174 U	0.174	0.400
Cobalt	0.0312 U	0.0312	0.100
Copper	0.107 U	0.107	0.400
Lead	0.0222 U	0.0222	0.200
Manganese	0.181 U	0.181	0.400
Nickel	0.199 U	0.199	0.400
Silver	0.0292 U	0.0292	0.100
Thallium	0.0250 U	0.0250	0.100
Vanadium	0.0426 U	0.0426	0.100
Batch number: 173100570805B	Sample number(s): 9296921-9296923		
Selenium	0.100 U	0.100	0.400
Batch number: 173100570805D	Sample number(s): 9296921-9296923		
Barium	0.182 U	0.182	0.400
Batch number: 173100571105	Sample number(s): 9296921-9296923		
Mercury	0.0100 U	0.0100	0.100
Batch number: 17317667632A	Sample number(s): 9296921-9296923		
Total Organic Carbon (TOC)	100 U	100	300

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/kg	ug/kg	ug/kg	ug/kg					
Batch number: J173141AA	Sample number(s): 9296921-9296923								
Chlorodifluoroethane	20	19.53	20	16.95	98	85	70-130	14	30
Chlorodifluoromethane	20	18.77	20	17.35	94	87	70-130	8	30
Chlorofluoromethane	20	17.97	20	16.81	90	84	70-130	7	30
Chloropentafluoroethane	250	367.55	250	349.85	147*	140*	70-130	5	30
1,1-Dichloro-1-fluoroethane	20	21.26	20	19.23	106	96	70-130	10	30
1,2-Dichloro-1-fluoroethane	20	17.47	20	17.71	87	89	70-130	1	30
Dichlorotetrafluoroethane	20	18.97	20	19.01	95	95	70-130	0	30
1,2-Dichlorotrifluoroethane	20	18.01	20	16.92	90	85	70-130	6	30
Dichlorotrifluoroethane	20	17.87	20	17.36	89	87	70-130	3	30
Fluoromethane	25	19.4	25	18.68	78	75	70-130	4	30
Freon 113a	20	17.37	20	17.29	87	86	70-130	0	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1,2-Trifluoroethane	20	18.46	20	17.32	92	87	70-130	6	30
Vinyl fluoride	100	78.38	100	75.42	78	75	70-130	4	30
Batch number: R173162AA	Sample number(s): 9296921-9296923								
Acetone	7500	7168.56	7500	6871.25	96	92	60-140	4	30
Benzene	1000	1043.01	1000	1006.66	104	101	70-130	4	30
Bromodichloromethane	1000	1013.26	1000	994.36	101	99	70-130	2	30
2-Butanone	7500	5545.22	7500	5798.18	74	77	60-140	4	30
n-Butylbenzene	1000	958.38	1000	1015.92	96	102	70-130	6	30
sec-Butylbenzene	1000	908.49	1000	970.57	91	97	70-130	7	30
tert-Butylbenzene	1000	864.71	1000	960.15	86	96	70-130	10	30
Carbon Disulfide	1000	1023	1000	989.62	102	99	60-140	3	30
Carbon Tetrachloride	1000	1026.45	1000	1032.08	103	103	70-130	1	30
Chlorobenzene	1000	966.58	1000	974.46	97	97	70-130	1	30
Chloroethane	1000	761.71	1000	803.88	76	80	60-140	5	30
Chloroform	1000	1035.74	1000	1035.74	104	104	70-130	0	30
Chloromethane	1000	967.5	1000	908.52	97	91	60-140	6	30
2-Chlorotoluene	1000	884.71	1000	932.67	88	93	70-130	5	30
4-Chlorotoluene	1000	893.02	1000	930.64	89	93	70-130	4	30
Chlorotrifluoroethene	1000	750.38	1000	781.49	75	78	70-130	4	30
Dibromochloromethane	1000	962.6	1000	985.8	96	99	70-130	2	30
1,2-Dibromoethane	1000	941.53	1000	980	94	98	70-130	4	30
1,2-Dichlorobenzene	1000	941.18	1000	977.99	94	98	70-130	4	30
1,3-Dichlorobenzene	1000	921.92	1000	959.6	92	96	70-130	4	30
1,4-Dichlorobenzene	1000	926.79	1000	975.19	93	98	70-130	5	30
Dichlorodifluoromethane	1000	932.94	1000	852.23	93	85	60-140	9	30
1,1-Dichloroethane	1000	1043.26	1000	1010.09	104	101	70-130	3	30
1,2-Dichloroethane	1000	1036.29	1000	1020.93	104	102	70-130	1	30
1,1-Dichloroethene	1000	1103.99	1000	1080.48	110	108	70-130	2	30
cis-1,2-Dichloroethene	1000	1074.68	1000	1040.14	107	104	70-130	3	30
trans-1,2-Dichloroethene	1000	1054.29	1000	1014.54	105	101	70-130	4	30
1,2-Dichloroethene (Total)	2000	2128.98	2000	2054.68	106	103	70-130	4	30
Dichlorofluoromethane	1000	960.04	1000	913.64	96	91	70-130	5	30
1,2-Dichloropropane	1000	1031.11	1000	1042.74	103	104	70-130	1	30
1,1-Dichloropropene	1000	1003.87	1000	1007.9	100	101	70-130	0	30
cis-1,3-Dichloropropene	1000	1034.59	1000	1026.95	103	103	70-130	1	30
Ethylbenzene	1000	938.27	1000	957.11	94	96	70-130	2	30
Freon 113	1000	1095.33	1000	1027.39	110	103	70-130	6	30
Freon 133a	1000	923.14	1000	1021.38	92	102	70-130	10	30
n-Hexane	1000	1023.48	1000	1019.36	102	102	70-130	0	30
2-Hexanone	5000	4649.14	5000	4662.34	93	93	60-140	0	30
Isobutyl Alcohol	25000	22063.99	25000	22879.24	88	92	70-130	4	30
Isopropylbenzene	1000	947.05	1000	971.81	95	97	70-130	3	30
p-Isopropyltoluene	1000	944.91	1000	1012.71	94	101	70-130	7	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methacrylonitrile	7500	7652.78	7500	7492.49	102	100	70-130	2	30
Methyl Methacrylate	1000	978.53	1000	986.5	98	99	70-130	1	30
Methyl Tertiary Butyl Ether	1000	1008.07	1000	989	101	99	70-130	2	30
4-Methyl-2-pentanone	5000	5061.27	5000	5092.88	101	102	60-140	1	30
Methylene Chloride	1000	1072.56	1000	1026.3	107	103	70-130	4	30
Propionitrile	7500	7995.87	7500	7493.84	107	100	70-130	6	30
n-Propylbenzene	1000	877.01	1000	954.73	88	95	70-130	8	30
Styrene	1000	935.36	1000	959.09	94	96	70-130	3	30
1,1,1,2-Tetrachloroethane	1000	948.21	1000	969.98	95	97	70-130	2	30
1,1,2,2-Tetrachloroethane	1000	901.97	1000	917.93	90	92	70-130	2	30
Tetrachloroethene	1000	953.64	1000	982.05	95	98	70-130	3	30
Tetrahydrofuran	5000	4249.02	5000	4477.78	85	90	70-130	5	30
Toluene	1000	958.91	1000	1003.88	96	100	70-130	5	30
1,1,1-Trichloroethane	1000	1050.43	1000	1047.32	105	105	70-130	0	30
1,1,2-Trichloroethane	1000	1004.84	1000	1014.75	100	101	70-130	1	30
Trichloroethene	1000	1016.04	1000	1010.42	102	101	70-130	1	30
Trichlorofluoromethane	1000	942.07	1000	876.22	94	88	60-140	7	30
1,2,4-Trimethylbenzene	1000	897.35	1000	944.73	90	94	70-130	5	30
1,3,5-Trimethylbenzene	1000	891.76	1000	964.8	89	96	70-130	8	30
Vinyl Chloride	1000	985.59	1000	961.65	99	96	70-130	2	30
m+p-Xylene	2000	1927.75	2000	1991.48	96	100	70-130	3	30
o-Xylene	1000	944.47	1000	959.24	94	96	70-130	2	30
Xylene (Total)	3000	2872.22	3000	2950.72	96	98	70-130	3	30
Batch number: X173131AA	Sample number(s): 9296922								
Acetone	150	155.22	150	165.26	103	110	60-140	6	30
Benzene	20	20.28	20	20.2	101	101	70-130	0	30
Bromodichloromethane	20	18.38	20	18.48	92	92	70-130	1	30
2-Butanone	150	148.09	150	161.18	99	107	60-140	8	30
n-Butylbenzene	20	17.86	20	17.65	89	88	70-130	1	30
sec-Butylbenzene	20	17.43	20	17.24	87	86	70-130	1	30
tert-Butylbenzene	20	18.06	20	17.95	90	90	70-130	1	30
Carbon Disulfide	20	18.9	20	18.58	94	93	60-140	2	30
Carbon Tetrachloride	20	19.35	20	18.74	97	94	70-130	3	30
Chloroethane	20	18.81	20	18.4	94	92	60-140	2	30
Chloroform	20	20.01	20	19.92	100	100	70-130	0	30
Chloromethane	20	20.03	20	19.75	100	99	60-140	1	30
2-Chlorotoluene	20	17.37	20	17.17	87	86	70-130	1	30
4-Chlorotoluene	20	17.93	20	17.84	90	89	70-130	0	30
Chlorotrifluoroethene	20	25.65	20	26.14	128	131*	70-130	2	30
Dibromochloromethane	20	16.77	20	16.96	84	85	70-130	1	30
1,2-Dibromoethane	20	16.94	20	17.45	85	87	70-130	3	30
1,3-Dichlorobenzene	20	18.25	20	18.01	91	90	70-130	1	30
Dichlorodifluoromethane	20	19.38	20	19.3	97	97	60-140	0	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloroethane	20	19.65	20	19.76	98	99	70-130	1	30
1,2-Dichloroethane	20	19.74	20	19.93	99	100	70-130	1	30
1,1-Dichloroethene	20	19.74	20	19.71	99	99	70-130	0	30
cis-1,2-Dichloroethene	20	20.04	20	20.01	100	100	70-130	0	30
trans-1,2-Dichloroethene	20	19.75	20	19.76	99	99	70-130	0	30
1,2-Dichloroethene (Total)	40	39.79	40	39.77	99	99	70-130	0	30
Dichlorofluoromethane	20	13.88	20	13.74	69*	69*	70-130	1	30
1,2-Dichloropropane	20	21.04	20	21.13	105	106	70-130	0	30
1,1-Dichloropropene	20	18.78	20	18.62	94	93	70-130	1	30
cis-1,3-Dichloropropene	20	16.68	20	17.19	83	86	70-130	3	30
Ethylbenzene	20	18.58	20	18.44	93	92	70-130	1	30
Freon 113	20	20.61	20	19.58	103	98	70-130	5	30
Freon 133a	20	16.42	20	16.75	82	84	70-130	2	30
n-Hexane	20	17.88	20	17.77	89	89	70-130	1	30
2-Hexanone	100	91.23	100	100.07	91	100	60-140	9	30
Isobutyl Alcohol	500	604.75	500	578.02	121	116	70-130	5	30
Isopropylbenzene	20	17.56	20	17.45	88	87	70-130	1	30
p-Isopropyltoluene	20	17.69	20	17.3	88	87	70-130	2	30
Methacrylonitrile	150	151.58	150	161.16	101	107	70-130	6	30
Methyl Methacrylate	20	17.43	20	18.62	87	93	70-130	7	30
Methyl Tertiary Butyl Ether	20	14.9	20	15.93	74	80	70-130	7	30
4-Methyl-2-pentanone	100	99.16	100	106.69	99	107	60-140	7	30
Methylene Chloride	20	19.81	20	20.09	99	100	70-130	1	30
Propionitrile	150	194.38	150	179.2	130	119	70-130	8	30
n-Propylbenzene	20	18.28	20	18.02	91	90	70-130	1	30
Styrene	20	18.63	20	18.43	93	92	70-130	1	30
1,1,1,2-Tetrachloroethane	20	18.06	20	18.21	90	91	70-130	1	30
1,1,2,2-Tetrachloroethane	20	16.95	20	17.59	85	88	70-130	4	30
Tetrachloroethene	20	18.6	20	18.58	93	93	70-130	0	30
Tetrahydrofuran	100	119.71	100	116.08	120	116	70-130	3	30
Toluene	20	18.84	20	18.69	94	93	70-130	1	30
1,1,1-Trichloroethane	20	19.92	20	19.64	100	98	70-130	1	30
1,1,2-Trichloroethane	20	18.76	20	19.05	94	95	70-130	2	30
Trichloroethene	20	19.07	20	19.03	95	95	70-130	0	30
Trichlorofluoromethane	20	21.85	20	20.7	109	103	60-140	5	30
1,2,4-Trimethylbenzene	20	17.7	20	17.38	88	87	70-130	2	30
1,3,5-Trimethylbenzene	20	17.31	20	17.19	87	86	70-130	1	30
Vinyl Chloride	20	19.17	20	19.1	96	95	70-130	0	30
m+p-Xylene	40	37.95	40	37.71	95	94	70-130	1	30
o-Xylene	20	17.12	20	17.22	86	86	70-130	1	30
Xylene (Total)	60	55.07	60	54.93	92	92	70-130	0	30

Batch number: J173111AA

Sample number(s): 9296924

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Chlorodifluoroethane	20	29.67	20	28.01	148	140	57-153	6	30
Chlorodifluoromethane	20	29.74	20	29.28	149	146	60-157	2	30
Chlorofluoromethane	20	24.56	20	24.99	123*	125*	65-120	2	30
Chloropentafluoroethane	250	336.11	250	328.68	134	131	13-171	2	30
1,1-Dichloro-1-fluoroethane	20	24.25	20	23.64	121	118	56-158	3	30
1,2-Dichloro-1-fluoroethane	20	25.6	20	25.84	128*	129*	71-120	1	30
Dichlorotetrafluoroethane	20	22.32	20	22.41	112	112	49-159	0	30
1,2-Dichlorotrifluoroethane	20	26.28	20	27.05	131*	135*	73-127	3	30
Dichlorotrifluoroethane	20	24.26	20	24.69	121*	123*	80-120	2	30
Fluoromethane	25	18.7	25	18.04	75	72	24-147	4	30
Freon 113a	20	24.63	20	25.26	123	126	60-156	3	30
1,1,2-Trifluoroethane	20	30.66	20	29.65	153*	148*	66-133	3	30
Vinyl fluoride	50	42.85	50	44.42	86	89	25-139	4	30
Batch number: Y173141AA Sample number(s): 9296924									
Acetone	150	158.68	150	156.58	106	104	60-140	1	20
Benzene	20	19.69	20	19.28	98	96	70-130	2	20
Bromodichloromethane	20	19.12	20	18.75	96	94	70-130	2	20
2-Butanone	150	143.02	150	142.92	95	95	60-140	0	20
n-Butylbenzene	20	19.65	20	19.2	98	96	70-130	2	20
sec-Butylbenzene	20	19.72	20	19.37	99	97	70-130	2	20
tert-Butylbenzene	20	18.33	20	18.13	92	91	70-130	1	20
Carbon Disulfide	20	18.93	20	18.36	95	92	60-140	3	20
Carbon Tetrachloride	20	17.93	20	17.56	90	88	70-130	2	20
Chlorobenzene	20	19.61	20	19.23	98	96	70-130	2	20
Chloroethane	20	17.61	20	17.48	88	87	60-140	1	20
Chloroform	20	19.74	20	19.38	99	97	70-130	2	20
Chloromethane	20	17.87	20	17.28	89	86	60-140	3	20
2-Chlorotoluene	20	18.82	20	18.4	94	92	70-130	2	20
4-Chlorotoluene	20	19.56	20	19.05	98	95	70-130	3	20
Chlorotrifluoroethane	20	14.98	20	15.02	75	75	70-130	0	20
Dibromochloromethane	20	18.64	20	18.78	93	94	70-130	1	20
1,2-Dibromoethane	20	19.4	20	19.28	97	96	70-130	1	20
1,2-Dichlorobenzene	20	19.68	20	19.13	98	96	70-130	3	20
1,3-Dichlorobenzene	20	19.47	20	19.07	97	95	70-130	2	20
1,4-Dichlorobenzene	20	19.73	20	19.49	99	97	70-130	1	20
Dichlorodifluoromethane	20	14.31	20	13.83	72	69	60-140	3	20
1,1-Dichloroethane	20	19.22	20	18.73	96	94	70-130	3	20
1,2-Dichloroethane	20	19.85	20	19.27	99	96	70-130	3	20
1,1-Dichloroethene	20	19.98	20	19.89	100	99	70-130	0	20
cis-1,2-Dichloroethene	20	20.56	20	20.16	103	101	70-130	2	20
trans-1,2-Dichloroethene	20	20.08	20	19.59	100	98	70-130	2	20
1,2-Dichloroethene (Total)	40	40.64	40	39.75	102	99	70-130	2	20
Dichlorofluoromethane	20	20.96	20	19.2	105	96	70-130	9	20

*- Outside of specification

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloropropane	20	19.44	20	19.28	97	96	70-130	1	20
1,1-Dichloropropene	20	18.77	20	18.39	94	92	70-130	2	20
cis-1,3-Dichloropropene	20	19.09	20	18.84	95	94	70-130	1	20
Ethylbenzene	20	19.9	20	19.67	100	98	70-130	1	20
Freon 113	20	16.17	20	15.68	81	78	70-130	3	20
Freon 133a	20	18.13	20	18.25	91	91	70-130	1	20
n-Hexane	20	13.99	20	13.5	70	67*	70-130	4	20
2-Hexanone	100	100.86	100	101.39	101	101	60-140	1	20
Isobutyl Alcohol	500	520.1	500	511.92	104	102	70-130	2	20
Isopropylbenzene	20	19.6	20	19.29	98	96	70-130	2	20
p-Isopropyltoluene	20	19.83	20	19.54	99	98	70-130	1	20
Methacrylonitrile	150	151.47	150	150.73	101	100	70-130	0	20
Methyl Methacrylate	20	19.02	20	18.98	95	95	70-130	0	20
Methyl Tertiary Butyl Ether	20	19.27	20	18.83	96	94	70-130	2	20
4-Methyl-2-pentanone	100	98.05	100	97.36	98	97	60-140	1	20
Methylene Chloride	20	19.78	20	19.38	99	97	70-130	2	20
Propionitrile	150	165.3	150	161.71	110	108	70-130	2	20
n-Propylbenzene	20	20.08	20	19.74	100	99	70-130	2	20
Styrene	20	20.93	20	20.64	105	103	70-130	1	20
1,1,1,2-Tetrachloroethane	20	18.7	20	18.53	93	93	70-130	1	20
1,1,2,2-Tetrachloroethane	20	19.29	20	19.13	96	96	70-130	1	20
Tetrachloroethene	20	19.44	20	19.23	97	96	70-130	1	20
Tetrahydrofuran	100	108.68	100	106.51	109	107	70-130	2	20
Toluene	20	20.08	20	19.66	100	98	70-130	2	20
1,1,1-Trichloroethane	20	18.82	20	18.09	94	90	70-130	4	20
1,1,2-Trichloroethane	20	20.27	20	20.34	101	102	70-130	0	20
Trichloroethene	20	19.67	20	19.09	98	95	70-130	3	20
Trichlorofluoromethane	20	17.58	20	16.93	88	85	60-140	4	20
1,2,4-Trimethylbenzene	20	20.08	20	19.87	100	99	70-130	1	20
1,3,5-Trimethylbenzene	20	20.03	20	19.72	100	99	70-130	2	20
Vinyl Chloride	20	17.97	20	17.23	90	86	70-130	4	20
m+p-Xylene	40	40.65	40	40.02	102	100	70-130	2	20
o-Xylene	20	19.13	20	18.79	96	94	70-130	2	20
Xylene (Total)	60	59.79	60	58.81	100	98	70-130	2	20
	ug/kg	ug/kg	ug/kg	ug/kg					
Batch number: 17314SLE026	Sample number(s): 9296921-9296923								
Acenaphthene	1666.67	1897.85			114		70-130		
Acenaphthylene	1666.67	1824.71			109		70-130		
Acetophenone	1666.67	1601.5			96		70-130		
4-Aminobiphenyl	1666.67	2336.16			140*		70-130		
Aniline	1666.67	1061.43			64		20-160		
Anthracene	1666.67	1736.99			104		70-130		
Benzidine	8333.33	3134.09			38		20-160		

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Benzo(a)anthracene	1666.67	1775.17			107		70-130		
Benzo(a)pyrene	1666.67	1661.22			100		70-130		
Benzo(b)fluoranthene	1666.67	1729.52			104		70-130		
Benzo(g,h,i)perylene	1666.67	1627.09			98		70-130		
Benzo(k)fluoranthene	1666.67	1844.47			111		70-130		
1,1'-Biphenyl	1666.67	1775.96			107		70-130		
4-Bromophenyl-phenylether	1666.67	1585.51			95		70-130		
Butylbenzylphthalate	1666.67	1835.76			110		70-130		
Di-n-butylphthalate	1666.67	1747.9			105		70-130		
Carbazole	1666.67	1645.02			99		70-130		
4-Chloro-3-methylphenol	1666.67	1604.22			96		70-130		
4-Chloroaniline	1666.67	280.23			17*		70-130		
bis(2-Chloroethoxy)methane	1666.67	1555.7			93		70-130		
bis(2-Chloroethyl)ether	1666.67	1658.22			99		70-130		
2-Chloronaphthalene	1666.67	2261.84			136*		70-130		
2-Chlorophenol	1666.67	1855.61			111		70-130		
4-Chlorophenyl-phenylether	1666.67	1621.19			97		70-130		
2,2'-oxybis(1-Chloropropane)	1666.67	1401.2			84		70-130		
Chrysene	1666.67	1826.94			110		70-130		
Dibenz(a,h)anthracene	1666.67	1758.48			106		70-130		
Dibenzofuran	1666.67	1792.94			108		70-130		
3,3'-Dichlorobenzidine	1666.67	1589.33			95		70-130		
2,4-Dichlorophenol	1666.67	1664.77			100		70-130		
Diethylphthalate	1666.67	1856.88			111		70-130		
2,4-Dimethylphenol	1666.67	1350.34			81		70-130		
Dimethylphthalate	1666.67	1688.76			101		70-130		
4,6-Dinitro-2-methylphenol	1666.67	1728.96			104		70-130		
2,4-Dinitrophenol	3333.33	3658			110		20-160		
2,4-Dinitrotoluene	1666.67	1815.33			109		70-130		
2,6-Dinitrotoluene	1666.67	1786.44			107		70-130		
1,4-Dioxane	1666.67	1130.28			68		20-160		
Diphenyl ether	1666.67	1614.06			97		70-130		
1,2-Diphenylhydrazine	1666.67	1792.55			108		70-130		
bis(2-Ethylhexyl)phthalate	1666.67	1909.35			115		70-130		
Fluoranthene	1666.67	1590.26			95		70-130		
Fluorene	1666.67	1746.91			105		70-130		
Hexachlorobenzene	1666.67	1542.63			93		70-130		
Hexachlorobutadiene	1666.67	1564.8			94		70-130		
Hexachlorocyclopentadiene	3333.33	3189.45			96		20-160		
Hexachloroethane	1666.67	1547.76			93		20-160		
Indeno(1,2,3-cd)pyrene	1666.67	1693.67			102		70-130		
Isophorone	1666.67	1566.12			94		70-130		
2-Methylnaphthalene	1666.67	1592.91			96		70-130		
2-Methylphenol	1666.67	1717.86			103		70-130		

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
4-Methylphenol	1666.67	1520.22			91		20-160		
Naphthalene	1666.67	1742.83			105		70-130		
1-Naphthylamine	3333.33	1668.35			50*		70-130		
2-Naphthylamine	3333.33	727.6			22*		70-130		
2-Nitroaniline	1666.67	1840.75			110		70-130		
3-Nitroaniline	1666.67	1566.31			94		70-130		
4-Nitroaniline	1666.67	1666.76			100		70-130		
Nitrobenzene	1666.67	1628.14			98		70-130		
2-Nitrophenol	1666.67	1736.53			104		70-130		
4-Nitrophenol	1666.67	1130.92			68		20-160		
N-Nitrosodimethylamine	1666.67	1528.47			92		20-160		
N-Nitroso-di-n-propylamine	1666.67	1534.1			92		70-130		
N-Nitrosodiphenylamine	1666.67	1652.41			99		70-130		
Di-n-octylphthalate	1666.67	2016.89			121		70-130		
Parathion	1666.67	1392.73			84		20-160		
Pentachlorobenzene	1666.67	1633.9			98		20-160		
Pentachlorophenol	1666.67	1446.46			87		20-160		
Phenanthrene	1666.67	1737.81			104		70-130		
Phenol	1666.67	1710.28			103		20-160		
Pyrene	1666.67	1756.86			105		70-130		
2,3,4,6-Tetrachlorophenol	1666.67	1705.38			102		70-130		
o-Toluidine	1666.67	648.14			39*		70-130		
1,2,4-Trichlorobenzene	1666.67	1664.62			100		70-130		
2,4,5-Trichlorophenol	1666.67	1854.34			111		70-130		
2,4,6-Trichlorophenol	1666.67	1870.05			112		70-130		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 173100570805	Sample number(s): 9296921-9296923								
Aluminum	200	200.21			100		80-120		
Calcium	400	403.27			101		80-120		
Iron	100	98.74			99		80-120		
Magnesium	200	201			100		80-120		
Potassium	1000	1000.98			100		80-120		
Sodium	1000	1011			101		80-120		
Zinc	50	50.63			101		80-120		
Batch number: 173100570805A	Sample number(s): 9296921-9296923								
Antimony	0.600	0.492			82		80-120		
Arsenic	1.00	0.886			89		80-120		
Beryllium	0.400	0.425			106		80-120		
Cadmium	0.500	0.479			96		80-120		
Chromium	5.00	5.08			102		80-120		
Cobalt	25	25.45			102		80-120		
Copper	5.00	5.25			105		80-120		

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/kg	LCS Conc mg/kg	LCSD Spike Added mg/kg	LCSD Conc mg/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Lead	1.50	1.51			101		80-120		
Manganese	5.00	5.46			109		80-120		
Nickel	5.00	4.96			99		80-120		
Silver	5.00	5.25			105		80-120		
Thallium	0.200	0.199			100		80-120		
Vanadium	5.00	5.46			109		80-120		
Batch number: 173100570805B	Sample number(s): 9296921-9296923								
Selenium	1.00	1.07			107		80-120		
Batch number: 173100570805D	Sample number(s): 9296921-9296923								
Barium	5.00	5.13			103		80-120		
Batch number: 1731005711105	Sample number(s): 9296921-9296923								
Mercury	0.100	0.101			101		80-120		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 17317667632A	Sample number(s): 9296921-9296923								
Total Organic Carbon (TOC)	7150	7240.85			101		47-143		
	%	%	%	%					
Batch number: 17310820007B	Sample number(s): 9296921-9296923								
Moisture	89.5	89.39			100		99-101		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: R173162AA	Sample number(s): 9296921-9296923 UNSPK: P294438									
Acetone	350 U	7878.15	8302.03	9236.46	8646.8	105	94	60-140	4	30
Benzene	165.9	1050.42	1614.6	1231.53	2056.85	138*	154*	70-130	24	30
Bromodichloromethane	51 U	1050.42	1024.35	1231.53	1100.74	98	89	70-130	7	30
2-Butanone	200 U	7878.15	6060.17	9236.46	6809.3	77	74	60-140	12	30
n-Butylbenzene	51 U	1050.42	936.92	1231.53	1120.91	89	91	70-130	18	30
sec-Butylbenzene	51 U	1050.42	942.66	1231.53	1091.59	90	89	70-130	15	30
tert-Butylbenzene	51 U	1050.42	921.66	1231.53	1100.41	88	89	70-130	18	30
Carbon Disulfide	51 U	1050.42	934.27	1231.53	1052.52	89	85	60-140	12	30
Carbon Tetrachloride	51 U	1050.42	1026.89	1231.53	1059.12	98	86	70-130	3	30
Chlorobenzene	10644.65	1050.42	20414.75	1231.53	21339.34	930 (2)	868 (2)	70-130	4	30
Chloroethane	100 U	1050.42	819.28	1231.53	894.7	78	73	60-140	9	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Chloroform	51 U	1050.42	1110.15	1231.53	1188.19	106	96	70-130	7	30
Chloromethane	100 U	1050.42	701.05	1231.53	738.2	67	60	60-140	5	30
2-Chlorotoluene	51 U	1050.42	927.67	1231.53	1052	88	85	70-130	13	30
4-Chlorotoluene	51 U	1050.42	919.89	1231.53	1043.83	88	85	70-130	13	30
Dibromochloromethane	51 U	1050.42	992.09	1231.53	1060.7	94	86	70-130	7	30
1,2-Dibromoethane	51 U	1050.42	1002.56	1231.53	1068.43	95	87	70-130	6	30
1,2-Dichlorobenzene	3522.85	1050.42	6771.8	1231.53	6023.23	309*	203*	70-130	12	30
1,3-Dichlorobenzene	175.4	1050.42	1207.97	1231.53	1319.27	98	93	70-130	9	30
1,4-Dichlorobenzene	6518.71	1050.42	11314.68	1231.53	9971.84	457 (2)	280 (2)	70-130	13	30
Dichlorodifluoromethane	100 U	1050.42	303.74	1231.53	257.46	29*	21*	60-140	16	30
1,1-Dichloroethane	51 U	1050.42	1061.78	1231.53	1081.59	101	88	70-130	2	30
1,2-Dichloroethane	51 U	1050.42	1076.3	1231.53	1157.83	102	94	70-130	7	30
1,1-Dichloroethene	51 U	1050.42	1051.29	1231.53	1083.09	100	88	70-130	3	30
cis-1,2-Dichloroethene	51 U	1050.42	1116.21	1231.53	1176.97	106	96	70-130	5	30
trans-1,2-Dichloroethene	51 U	1050.42	1049.47	1231.53	1059.32	100	86	70-130	1	30
1,2-Dichloroethene (Total)	51 U	2100.84	2165.68	2463.06	2236.29	103	91	70-130	3	30
Dichlorofluoromethane	100 U	1050.42	1120.13	1231.53	1331.07	107	108	70-130	17	30
1,2-Dichloropropane	51 U	1050.42	1071.52	1231.53	1138.15	102	92	70-130	6	30
1,1-Dichloropropene	51 U	1050.42	1005.8	1231.53	1036.06	96	84	70-130	3	30
cis-1,3-Dichloropropene	51 U	1050.42	1090.42	1231.53	1149.19	104	93	70-130	5	30
Ethylbenzene	51 U	1050.42	981.09	1231.53	1054.2	93	86	70-130	7	30
Freon 113	100 U	1050.42	2254.22	1231.53	17771.9	215*	1443*	70-130	155*	30
n-Hexane	51 U	1050.42	683.94	1231.53	668.97	65*	54*	70-130	2	30
2-Hexanone	150 U	5252.1	4915.03	6157.64	5226.89	94	85	60-140	6	30
Isobutyl Alcohol	5,100 U	26260.5	21426.1	30788.2	25322.47	82	82	70-130	17	30
Isopropylbenzene	50.76	1050.42	1071.74	1231.53	1185.13	97	92	70-130	10	30
p-Isopropyltoluene	51 U	1050.42	939.24	1231.53	1126.34	89	91	70-130	18	30
Methacrylonitrile	250 U	7878.15	8167.74	9236.46	8535.08	104	92	70-130	4	30
Methyl Methacrylate	51 U	1050.42	1014.49	1231.53	1059.1	97	86	70-130	4	30
Methyl Tertiary Butyl Ether	25 U	1050.42	1074.84	1231.53	1117.91	102	91	70-130	4	30
4-Methyl-2-pentanone	150 U	5252.1	5405.55	6157.64	5809.47	103	94	60-140	7	30
Methylene Chloride	100 U	1050.42	1228.12	1231.53	1366.61	117	111	70-130	11	30
Propionitrile	1,500 U	7878.15	8121.87	9236.46	8782.07	103	95	70-130	8	30
n-Propylbenzene	51 U	1050.42	894.19	1231.53	1030.34	85	84	70-130	14	30
Styrene	51 U	1050.42	979.01	1231.53	1064.71	93	86	70-130	8	30
1,1,1,2-Tetrachloroethane	51 U	1050.42	1002.5	1231.53	1086.32	95	88	70-130	8	30
1,1,2,2-Tetrachloroethane	51 U	1050.42	921.52	1231.53	1069.96	88	87	70-130	15	30
Tetrachloroethene	531.3	1050.42	2516.52	1231.53	2747.97	189*	180*	70-130	9	30
Tetrahydrofuran	200 U	5252.1	4337.3	6157.64	4795.25	83	78	70-130	10	30
Toluene	51 U	1050.42	1004.94	1231.53	1083.75	96	88	70-130	8	30
1,1,1-Trichloroethane	51 U	1050.42	1056.48	1231.53	1071.6	101	87	70-130	1	30
1,1,2-Trichloroethane	51 U	1050.42	1043.14	1231.53	1124.95	99	91	70-130	8	30
Trichloroethene	51 U	1050.42	1077.95	1231.53	1180.35	103	96	70-130	9	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Trichlorofluoromethane	100 U	1050.42	1224.95	1231.53	6859.4	117	557*	60-140	139*	30
1,2,4-Trimethylbenzene	51 U	1050.42	909.78	1231.53	1063.34	87	86	70-130	16	30
1,3,5-Trimethylbenzene	51 U	1050.42	904.86	1231.53	1059.09	86	86	70-130	16	30
Vinyl Chloride	51 U	1050.42	703.41	1231.53	707.38	67*	57*	70-130	1	30
m+p-Xylene	51 U	2100.84	2067.18	2463.06	2215.09	98	90	70-130	7	30
o-Xylene	51 U	1050.42	1012.59	1231.53	1097.49	96	89	70-130	8	30
Xylene (Total)	51 U	3151.26	3079.77	3694.58	3312.58	98	90	70-130	7	30
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg					
Batch number: 17314SLE026	Sample number(s): 9296921-9296923 UNSPK: P300729									
Acenaphthene	3 U	1664.45	1932.67	1659.48	1923.05	116	116	70-130	0	30
Acenaphthylene	3 U	1664.45	1769.02	1659.48	1901.18	106	115	70-130	7	30
Acetophenone	17 U	1664.45	1632.85	1659.48	1671.38	98	101	70-130	2	30
4-Aminobiphenyl	170 U	1664.45	3190.54	1659.48	3206.43	192*	193*	70-130	0	30
Aniline	170 U	1664.45	1028.16	1659.48	1012.32	62	61	20-160	2	30
Anthracene	3 U	1664.45	1712.52	1659.48	1670.48	103	101	70-130	2	30
Benzidine	250 U	8322.24	3508.37	8297.38	3175.4	42	38	20-160	10	30
Benzo(a)anthracene	3 U	1664.45	1575.22	1659.48	1655.02	95	100	70-130	5	30
Benzo(a)pyrene	3 U	1664.45	1606.54	1659.48	1594.39	97	96	70-130	1	30
Benzo(b)fluoranthene	3 U	1664.45	1792.98	1659.48	1705.06	108	103	70-130	5	30
Benzo(g,h,i)perylene	3 U	1664.45	1655.83	1659.48	1674.83	99	101	70-130	1	30
Benzo(k)fluoranthene	3 U	1664.45	1711.59	1659.48	1732.34	103	104	70-130	1	30
1,1'-Biphenyl	17 U	1664.45	1852.79	1659.48	1765.02	111	106	70-130	5	30
4-Bromophenyl-phenylether	17 U	1664.45	1667.55	1659.48	1523.46	100	92	70-130	9	30
Butylbenzylphthalate	66 U	1664.45	1816.8	1659.48	1827.77	109	110	70-130	1	30
Di-n-butylphthalate	66 U	1664.45	1735.99	1659.48	1549.67	104	93	70-130	11	30
Carbazole	17 U	1664.45	1636.22	1659.48	1477.01	98	89	70-130	10	30
4-Chloro-3-methylphenol	17 U	1664.45	1776.5	1659.48	1745.5	107	105	70-130	2	30
4-Chloroaniline	33 U	1664.45	615.12	1659.48	548.44	37*	33*	70-130	11	30
bis(2-Chloroethoxy)methane	17 U	1664.45	1625.74	1659.48	1525.74	98	92	70-130	6	30
bis(2-Chloroethyl)ether	17 U	1664.45	1606.14	1659.48	1643.61	96	99	70-130	2	30
2-Chloronaphthalene	7 U	1664.45	1796.26	1659.48	1722.06	108	104	70-130	4	30
2-Chlorophenol	17 U	1664.45	1814.11	1659.48	1876.91	109	113	70-130	3	30
4-Chlorophenyl-phenylether	17 U	1664.45	1582.9	1659.48	1762.25	95	106	70-130	11	30
2,2'-oxybis(1-Chloropropane)	17 U	1664.45	1480.32	1659.48	1505.69	89	91	70-130	2	30
Chrysene	3 U	1664.45	1554.72	1659.48	1706.86	93	103	70-130	9	30
Dibenz(a,h)anthracene	3 U	1664.45	1539.89	1659.48	1536.89	93	93	70-130	0	30
Dibenzofuran	17 U	1664.45	1793.86	1659.48	1859.39	108	112	70-130	4	30
3,3'-Dichlorobenzidine	99 U	1664.45	969.92	1659.48	1132.6	58*	68*	70-130	15	30
2,4-Dichlorophenol	17 U	1664.45	1703.51	1659.48	1644.71	102	99	70-130	4	30
Diethylphthalate	66 U	1664.45	1863.09	1659.48	1963.84	112	118	70-130	5	30
2,4-Dimethylphenol	17 U	1664.45	1388.12	1659.48	1379.4	83	83	70-130	1	30
Dimethylphthalate	66 U	1664.45	1665.72	1659.48	1812.9	100	109	70-130	8	30

*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
4,6-Dinitro-2-methylphenol	170 U	1664.45	1495.16	1659.48	1601.55	90	97	70-130	7	30
2,4-Dinitrophenol	300 U	3328.89	1547.45	3318.95	1847.44	46	56	20-160	18	30
2,4-Dinitrotoluene	66 U	1664.45	1861.75	1659.48	1884.26	112	114	70-130	1	30
2,6-Dinitrotoluene	17 U	1664.45	1715.68	1659.48	1827.9	103	110	70-130	6	30
1,4-Dioxane	99 U	1664.45	1236.13	1659.48	1236.09	74	74	20-160	0	30
Diphenyl ether	17 U	1664.45	1645.82	1659.48	1670.71	99	101	70-130	2	30
1,2-Diphenylhydrazine	17 U	1664.45	1772.5	1659.48	1804.64	106	109	70-130	2	30
bis(2-Ethylhexyl)phthalate	66 U	1664.45	1728.35	1659.48	1812.95	104	109	70-130	5	30
Fluoranthene	3 U	1664.45	1558.98	1659.48	1536.25	94	93	70-130	1	30
Fluorene	3 U	1664.45	1748.75	1659.48	1804.33	105	109	70-130	3	30
Hexachlorobenzene	3 U	1664.45	1569.88	1659.48	1502.95	94	91	70-130	4	30
Hexachlorobutadiene	17 U	1664.45	1553.35	1659.48	1517.89	93	91	70-130	2	30
Hexachlorocyclopentadiene	170 U	3328.89	2454.05	3318.95	2711.44	74	82	20-160	10	30
Hexachloroethane	33 U	1664.45	1610.47	1659.48	1641.01	97	99	20-160	2	30
Indeno(1,2,3-cd)pyrene	3 U	1664.45	1535.7	1659.48	1617.29	92	97	70-130	5	30
Isophorone	17 U	1664.45	1663.38	1659.48	1646.98	100	99	70-130	1	30
2-Methylnaphthalene	3 U	1664.45	1730.01	1659.48	1699.16	104	102	70-130	2	30
2-Methylphenol	17 U	1664.45	1799.15	1659.48	1860.75	108	112	70-130	3	30
4-Methylphenol	17 U	1664.45	1579.02	1659.48	1639.41	95	99	20-160	4	30
Naphthalene	3 U	1664.45	1740.4	1659.48	1712.16	105	103	70-130	2	30
1-Naphthylamine	170 U	3328.89	1590.86	3318.95	1513.25	48*	46*	70-130	5	30
2-Naphthylamine	170 U	3328.89	979.11	3318.95	980.54	29*	30*	70-130	0	30
2-Nitroaniline	17 U	1664.45	1957.91	1659.48	2012.08	118	121	70-130	3	30
3-Nitroaniline	66 U	1664.45	1526.82	1659.48	1461.62	92	88	70-130	4	30
4-Nitroaniline	66 U	1664.45	1572.47	1659.48	1779.1	94	107	70-130	12	30
Nitrobenzene	17 U	1664.45	1693.1	1659.48	1707.06	102	103	70-130	1	30
2-Nitrophenol	17 U	1664.45	1802.76	1659.48	1802.56	108	109	70-130	0	30
4-Nitrophenol	170 U	1664.45	976.39	1659.48	969.06	59	58	20-160	1	30
N-Nitrosodimethylamine	66 U	1664.45	1673.04	1659.48	1658.38	101	100	20-160	1	30
N-Nitroso-di-n-propylamine	17 U	1664.45	1653.6	1659.48	1678.3	99	101	70-130	1	30
N-Nitrosodiphenylamine	17 U	1664.45	1588.85	1659.48	1616.65	95	97	70-130	2	30
Di-n-octylphthalate	66 U	1664.45	2052.68	1659.48	2035.74	123	123	70-130	1	30
Parathion	170 U	1664.45	1593.48	1659.48	1429.08	96	86	20-160	11	30
Pentachlorobenzene	17 U	1664.45	1605.62	1659.48	1701.62	96	103	20-160	6	30
Pentachlorophenol	33 U	1664.45	1227.74	1659.48	1103.61	74	67	20-160	11	30
Phenanthrene	3 U	1664.45	1700.07	1659.48	1684.76	102	102	70-130	1	30
Phenol	17 U	1664.45	1730.37	1659.48	1756.99	104	106	20-160	2	30
Pyrene	3 U	1664.45	1674.84	1659.48	1696.94	101	102	70-130	1	30
2,3,4,6-Tetrachlorophenol	66 U	1664.45	1736.85	1659.48	1821.18	104	110	70-130	5	30
o-Toluidine	200 U	1664.45	734.5	1659.48	691.34	44*	42*	70-130	6	30
1,2,4-Trichlorobenzene	17 U	1664.45	1651.91	1659.48	1586.86	99	96	70-130	4	30
2,4,5-Trichlorophenol	17 U	1664.45	1791.3	1659.48	1863.46	108	112	70-130	4	30
2,4,6-Trichlorophenol	17 U	1664.45	1843.51	1659.48	1844.94	111	111	70-130	0	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 173100570805	Sample number(s): 9296921-9296923 UNSPK: P300729									
Aluminum	3128.92	176.99	5534.79	186.92	5868.48	1359 (2)	1466 (2)	75-125	6	20
Calcium	60.75	353.98	423.37	373.83	433.15	102	100	75-125	2	20
Iron	4450.05	88.5	5591.27	93.46	6376.46	1290 (2)	2061 (2)	75-125	13	20
Magnesium	615.28	176.99	1149.22	186.92	1125.01	302*	273*	75-125	2	20
Potassium	506.71	884.96	1857.13	934.58	1941.24	153*	153*	75-125	4	20
Sodium	71.95	884.96	965.5	934.58	987.64	101	98	75-125	2	20
Zinc	8.50	44.25	54.91	46.73	57.42	105	105	75-125	4	20
Batch number: 173100570805A	Sample number(s): 9296921-9296923 UNSPK: P300729									
Antimony	0.0825 U	1.06	0.774	1.12	0.844	73*	75	75-125	9	20
Arsenic	1.14	1.77	3.23	1.87	3.37	118	119	75-125	4	20
Beryllium	0.0904	0.708	0.807	0.748	0.834	101	99	75-125	3	20
Cadmium	0.0304 U	0.885	0.865	0.935	0.853	98	91	75-125	1	20
Chromium	5.45	8.85	15.83	9.35	15.8	117	111	75-125	0	20
Cobalt	1.48	44.25	46.07	46.73	49.25	101	102	75-125	7	20
Copper	3.13	8.85	13.04	9.35	13.86	112	115	75-125	6	20
Lead	1.66	2.65	6.20	2.80	4.84	171*	113	75-125	25*	20
Manganese	33.47	8.85	51.94	9.35	50.54	209*	183*	75-125	3	20
Nickel	3.57	8.85	13.74	9.35	14.63	115	118	75-125	6	20
Silver	0.0258 U	8.85	8.95	9.35	9.58	101	103	75-125	7	20
Thallium	0.0242	0.354	0.372	0.374	0.393	98	99	75-125	6	20
Vanadium	4.57	8.85	15.12	9.35	15.28	119	115	75-125	1	20
Batch number: 173100570805B	Sample number(s): 9296921-9296923 UNSPK: P300729									
Selenium	0.0885 U	1.77	1.79	1.87	1.84	101	98	75-125	3	20
Batch number: 173100570805D	Sample number(s): 9296921-9296923 UNSPK: P300729									
Barium	9.77	8.85	33.45	9.35	23.67	268*	149*	75-125	34*	20
Batch number: 173100571105	Sample number(s): 9296921-9296923 UNSPK: P294438									
Mercury	0.175	0.156	0.289	0.161	0.345	73*	105	80-120	18	20
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 17317667632A	Sample number(s): 9296921-9296923 UNSPK: 9296922									
Total Organic Carbon (TOC)	294.24	11700	13872.22			116		47-143		

*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/kg	DUP Conc mg/kg	DUP RPD	DUP RPD Max
Batch number: 173100570805	Sample number(s): 9296921-9296923 BKG: P300729			
Aluminum	3128.92	3873.93	21*	20
Calcium	60.75	66.85	10 (1)	20
Iron	4450.05	6218.75	33*	20
Magnesium	615.28	858.62	33*	20
Potassium	506.71	557.1	9	20
Sodium	71.95	80.92	12 (1)	20
Zinc	8.50	12.31	37* (1)	20
Batch number: 173100570805A	Sample number(s): 9296921-9296923 BKG: P300729			
Antimony	0.0825 U	0.0879 U	0 (1)	20
Arsenic	1.14	1.18	3 (1)	20
Beryllium	0.0904	0.108	18 (1)	20
Cadmium	0.0304 U	0.0325 U	0 (1)	20
Chromium	5.45	6.51	18	20
Cobalt	1.48	1.81	20	20
Copper	3.13	4.40	34*	20
Lead	1.66	1.97	17	20
Manganese	33.47	44.22	28*	20
Nickel	3.57	4.87	31*	20
Silver	0.0258 U	0.0275 U	0 (1)	20
Thallium	0.0242	0.0236 U	200* (1)	20
Vanadium	4.57	5.49	18	20
Batch number: 173100570805B	Sample number(s): 9296921-9296923 BKG: P300729			
Selenium	0.0885 U	0.0943 U	0 (1)	20
Batch number: 173100570805D	Sample number(s): 9296921-9296923 BKG: P300729			
Barium	9.77	10.49	7	20
Batch number: 173100571105	Sample number(s): 9296921-9296923 BKG: P294438			
Mercury	0.175	0.201	14 (1)	20
	mg/kg	mg/kg		
Batch number: 17317667632A	Sample number(s): 9296921-9296923 BKG: 9296922			
Total Organic Carbon (TOC)	294.24	314.82	7 (1)	7
	%	%		
Batch number: 17310820007B	Sample number(s): 9296921-9296923 BKG: P296374			
Moisture	8.49	9.17	8*	5

*- Outside of specification

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P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: Freons

Batch number: J173111AA

	1,2-Dichloroethane-d4	Fluorobenzene
9296924	106	106
Blank	110	112
LCS	107	107
LCSD	108	108
Limits:	70-130	70-130

Analysis Name: Freons

Batch number: J173141AA

	1,2-Dichloroethane-d4	Fluorobenzene
9296921	102	100
9296922	103	101
9296923	101	100
Blank	99	94
LCS	101	101
LCSD	101	103
Limits:	70-130	70-130

Analysis Name: TCL Volatiles + Add'l Cmpds

Batch number: R173162AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9296921	80	80	72	74
9296923	65*	69*	59*	70
Blank	98	100	91	91
LCS	104	106	94	96
LCSD	101	103	99	96
MS	74	75	67*	74
MSD	71	74	68*	65*
Limits:	70-130	70-130	70-130	70-130

Analysis Name: TCL Volatiles + Add'l Cmpds

Batch number: X173131AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9296922	106	107	91	100
Blank	106	106	94	88
LCS	100	100	97	99
LCSD	100	100	97	99

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 11/20/2017 08:58

Group Number: 1870508

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: TCL Volatiles + Add'l Cmpds
Batch number: X173131AA

Limits: 70-130 70-130 70-130 70-130

Analysis Name: TCL Volatiles + Add'l Cmpds
Batch number: Y173141AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9296924	100	104	97	92
Blank	98	103	98	94
LCS	95	100	100	100
LCSD	95	99	100	101
Limits:	70-130	70-130	70-130	70-130

Analysis Name: TCL SVOAs + Add'l Cmpds
Batch number: 17314SLE026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
9296921	95	101	95	94	87	95
9296922	98	103	99	97	96	94
9296923	97	101	86	91	88	91
Blank	90	99	97	88	93	92
LCS	102	107	90	90	101	96
MS	103	107	90	94	98	91
MSD	106	109	96	94	102	92
Limits:	30-130	30-130	30-130	30-130	30-130	30-130

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



Client: Chambers Works

Delivery and Receipt Information

Delivery Method: Fed Ex Arrival Timestamp: 11/02/2017 9:40
 Number of Packages: 1 Number of Projects: 1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	No
Custody Seal Present:	Yes	Sample Date/Times match COC:	No
Custody Seal Intact:	Yes	VOA Vial Headspace \geq 6mm:	N/A
Samples Chilled:	Yes	Total Trip Blank Qty:	0
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Melvin Sanchez (8943) at 14:59 on 11/02/2017

Samples Chilled Details

Thermometer Types: *DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	32170023	-0.3	IR	Wet	Y	Loose/Bag	N

Sample ID Discrepancy Details

Sample ID on COC	Sample ID on Label	Comments
D15-BOR-24-(7.2-7.7)	D16-BOR-24-(7.2-7.7)	

Sample Date/Time Discrepancy Details

Sample ID on COC	Date/Time on Label	Comments
D15-BOR-24-(7.0-7.2)	11/01/2017 13:55	

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	non-detect
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
J (or G, I, X)	Estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.